BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

BUNGE MILLING, INC.,	)	
	)	
Petitioner,	)	
	)	
v.	)	
	)	PCB No. 2023-92
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY	)	(Permit Appeal – Air)
	)	
	)	
Respondent.	)	

NOTICE OF FILING

To: See Attached Service List (Via Electronic Filing)

PLEASE TAKE NOTICE that the undersigned filed today with the Office of the Clerk of the Illinois Pollution Control Board by electronic filing the following CERTIFICATE OF RECORD ON APPEAL and RECORD, copies of which are attached hereto and hereby served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: /s/Christina L. Nannini

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Dated: May 5, 2023

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on May 5, 2023, she caused to be served by electronic mail, a true and correct copy of the following instruments entitled Notice of Filing, Certificate of Record on Appeal and Record to:

Thor W. Ketzback
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/s/ Katie J Johnson
Katie J. Johnson
Environmental Bureau

Under penalties as provided by law pursuant to Section 1-109 of the Code of Civil Procedure, the undersigned certifies that the statements set forth in this Certificate of Service are true and correct, except as to matters therein stated to be on information and belief and as to such matters the undersigned certifies as aforesaid that she verily believes the same to be true.

/s/ Katie J Johnson
Katie J. Johnson
Environmental Bureau

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

BUNGE MILLING, INC.,	)	
	)	
Petitioner,	)	
	)	
v.	)	
	)	PCB No. 2023-92
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY	)	(Permit Appeal – Air)
	)	
	)	
Respondent.	)	

CERTIFICATE OF RECORD ON APPEAL

Respondent, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA"), in accordance with the procedural rules of the Illinois Pollution Control Board ("Board") as set forth in 35 Ill. Adm. Code 105.212 and 105.116, files as its Record in this cause the Illinois EPA's record of Federally Enforceable State Operating Permit ("FESOP") 96020027 issued to Bunge Milling, Inc., on January 4, 2023, which is attached and consists of the following documents:

R1 – R25:	Guidance on Limiting Potential to Emit in New Source Permitting – June 13, 1989
R25 – R64:	Excerpts from New Source Review Workshop Manual (Draft) – October 1990
R65 – R68:	Use of Long Term Rolling Averages to Limit Potential to Emit – February 24, 1992
R69 – R79:	Guidance an Enforceability Requirements for Limiting Potential to Emit through SIP and § 112 Rules and General Permits – January 25, 1995
R80 – R132:	Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act – January 25, 1995
R133 – R167:	White Paper for Streamlined Development of Part 70 Permit Applications – July 10, 1995
R168 – R189:	Effective Limits on Potential to Emit Issues and Options – January 31, 1996

R190 – R242:	White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program – March 5, 1996
R243 – R254:	Guidelines: Practical Enforceability – September 9, 1999
R255 – R258:	Joint Construction and Operating Permit No. 03040020 issued on May 8, 2003
R259 – R818:	Title V – Clean Air Act Permit Program (CAAPP) Permit and Title I Permit issued November 24, 2003
R819 – R820:	Construction Permit No. 04070017 issued August 6, 2004
R821 – R824:	Construction Permit No. 04080007 issued September 10, 2004
R825 – R859:	Revised Title V – Clean Air Act Permit Program (CAAPP) Permit and Title I Permit issued December 6, 2004
R860 – R909:	Significant Title V Permit Modification Application received August 31, 2005
R910 – R915:	Construction Permit No. 06030003 issued June 23, 2006
R916 – R917:	Construction Permit No. 06040023 issued July 20, 2006
R918 – R933:	Construction Permit No. 06050053 issued August 30, 2006
R934	CAAPP Permit Reviews Checklist date received June 23, 2010
R935 – R994:	Minor Title V Permit Modification Application dated June 14, 2010 (4 copies)
R995 – R1016:	Construction Permit No. 10050056 issued November 30, 2010
R1017-R1018	Construction Permit No. 11010018 issued March 22, 2011
R1019-R1020	Construction Permit No. 11050002 issued August 1, 2011
R1021 – R1048:	Significant Title V Permit Modification Application received January 12, 2011
R1049 – R1061:	Minor Title V Permit Modification Application received May 2, 2011
R1062 – R1068:	Emails between Robert Henricks and Bob Bernoteit dated October 4, 2011
R1069 – R1072:	Construction Permit No. 11070017 issued October 11, 2011
R1073 – R1079:	Emails between Robert Henricks and Bob Bernoteit dated October 27, 2011
R1080:	Permit Review Traveler Sheet received November 14, 2011
R1081 – R1100:	FESOP Application received November 14, 2011

R1101 – R1102:	CAAPP-Title V FESOP Completeness Review Sheet date received November 14, 2011
R1103:	Notice of Incompleteness for CAAPP Application dated November 30, 2011
R1104 – R1106:	Emails between Lori Pennington, Michael Reed, and Bob Bernoteit dated November 16, 2011
R1107 – R1111:	Emails between Linda Marr and Bob Bernoteit dated November 29, 2011 – with attachment
R1112 – R1115:	Emails between Robert Henricks and Bob Bernoteit dated December 2, 2011
R1116:	Permit Review Traveler Sheet received December 5, 2011
R1117 – R1124:	FESOP Application received December 5, 2011
R1125 – R1162:	Draft FESOP
R1163 – R1164:	Construction Permit No. 11110009 issued December 5, 2011
R1165 – R1166:	CAAPP-Title V FESOP Completeness Review Sheet received December 5, 2011
R1167:	CAAPP Application Completeness Determination dated December 6, 2011
R1168 – R1169:	Emails between Michael Dragovich and James Burris dated July 3, 2013
R1170 – R1175:	Construction Permit No. 15100009 issued December 21, 2015
R1176 – R1188:	Construction Permit Application received March 15, 2016
R1189 – R1194:	Construction Permit No. 16030026 issued May 19, 2016
R1195:	Email from EJRequest@illinois.gov to Bob Bernoteit, Elizabeth Rupel, Brad Frost, Chris Pressnall, and German Barria dated February 17, 2017
R1196:	Email from EJRequest@illinois.gov to Elizabeth Rupel, Brad Frost, Chris Pressnall, and German Barria dated March 10, 2017
R1197:	EJ Review Request #1464 review requested February 17, 2017
R1198 – R1216:	Construction Permit Application received May 14, 2018
R1217 – R1221:	Emails between German Barria and James Burris dated July 31, 2018 through August 3, 2018
R1222 – R1229:	Construction Permit No. 18050016 issued August 8, 2018

R1230 – R1298:	Email from Bob Bernoteit to German Barria dated June 1, 2021 and attached draft FESOP and project summary
R1299 – R1316:	Email from German Barria to James Burris dated June 1, 2021 and attached documents
R1317:	Email from James Burris to German Barria dated June 1, 2021
R1318 – R1335:	Emails between Bob Bernoteit and German Barria dated June 2, 2021 and attached spreadsheet
R1336 – R1805:	Email between German Barria and James Burris dated April 13, 2022 with attachments
R1806 – R1888:	Email between German Barria and Bob Bernoteit dated April 26, 2022 with attachments (excluding attachments not related to FESOP 96020027)
R1889:	Emails between Bob Bernoteit and German Barria dated April 28, 2022
R1890 – R1891:	Emails between James Burris and German Barria dated May 3, 2022
R1892 – R1957:	Email from German Barria to Bob Bernoteit dated June 7, 2022 with attachments (excluding attachments not related to FESOP 96020027)
R1958 – R1965:	Emails between Bob Bernoteit and German Barria dated June 13, 2022
R1966 – R1967:	Email between Bob Bernoteit and German Barria dated June 13, 2022
R1968 – R2030:	Emails between Bob Bernoteit and German Barria from June 7, 2022 and June 21, 2022 and attachments (excluding attachment not related to FESOP 96020027)
R2031 – R2093:	Email from German Barria to James Burris dated June 22, 2022 and attachment (excluding attachments not related to FESOP 96020027)
R2094 – R2095:	Emails between James Burris and German Barria on June 22, 2022 and June 23, 2022
R2096 – R2157:	Emails between German Barria and James Burris dated June 24, 2022 and June 27, 2022 and attachments
R2158 – R2161:	Emails between German Barria and James Burris from June 22, 2022 to June 28, 2022 (excluding attachment not related to FESOP 96020027)
R2162 – R2165:	Emails between Bob Bernoteit, German Barria, and James Burris from June 22, 2022 through June 29, 2022
R2166 – R2171:	Emails between German Barria and James Burris from June 22, 2022 through June 29, 2022

R2172 – R2177:	Emails between James Burris and German Barria from June 22, 2022 through June 30, 2022
R2178 – R2184:	Complaint record dated June 30, 2022
R2185 – R2190:	Emails between German Barria, Bill Mar, Michelle Bublitz, Bob Bernoteit, and James Burris from June 22, 2022 through July 1, 2022
R2191 – R2196:	Emails between Bob Bernoteit, Michelle Bublitz, German Barria, and James Burris from June 22, 2022 through July 1, 2022
R2197:	Email from Bob Bernoteit to Michelle Bublitz dated July 1, 2022
R2198 – R2205:	Emails between Bill Marr, Michelle Bublitz, Bob Bernoteit, German Barria, and James Burris from June 22, 2022 through July 5, 2022
R2206 – R2213:	Emails between Bill Marr, Michelle Bublitz, Bob Bernoteit, German Barria, and James Burris from June 22, 2022 through July 5, 2022
R2214 – R2221:	Emails between Bill Marr, Michelle Bublitz, Bob Bernoteit, German Barria, and James Burris from June 22, 2022 through July 5, 2022
R2222– R2223:	July 5, 2022 Webex meeting invitation
R2224 – R2231:	Emails between Bill Marr, Michelle Bublitz, Bob Bernoteit, German Barria, and James Burris from June 22, 2022 through July 5, 2022
R2232 – R2239:	Emails between Bill Marr, Michelle Bublitz, Bob Bernoteit, German Barria, and James Burris from June 22, 2022 through July 5, 2022
R2240:	Email from German Barria to James Burris dated July 5, 2022
R2241 – R2300:	Email from German Barria to James Burris dated July 5, 2022 and attachments (excluding attachment not related to FESOP 96020027)
R2301 – R2362:	Emails between Bob Bernoteit, Bill Marr, German Barria, and James Burris dated July 5, 2022 and attachments (excluding attachment not related to FESOP 96020027)
R2363 – R2366:	Emails between Bob Bernoteit, Bill Marr, and Sabrina Bailey dated July 5, 2022 and attachments
R2367 – R2370:	Emails between Bill Marr, Julie Armitage, Bob Bernoteit, and Sabrina Bailey dated July 5, 2022 and attachments
R2371 – R2372:	Emails between Bill Marr, Bob Bernoteit, Julie Armitage, and Sabrina Bailey dated July 5, 2022
R2373 – R2434:	Emails between Bill Marr, Julie Armitage, Deidre McQuillen, Ron Robeen, and Donna Howard dated July 6, 2022 and attachments (excluding attachment not related to FESOP 96020027)

R2435:	Emails between Bill Marr and Michelle Bublitz dated July 8, 2022
R2436 – R2496:	Emails between German Barria, Trent Nation, Marlisha Walton, Marcus Rothenberg, and Danielle Edwards from July 5, 2022 through July 13, 2022 and attachment (excluding attachment not related to FESOP 96020027)
R2497 – R2559:	Emails between German Barria, Trent Nation, Marlisha Walton, Marcus Rothenberg, and Danielle Edwards from July 5, 2022 through July 13, 2022 and attachment (excluding attachment not related to FESOP 96020027)
R2560 – R2562:	Emails between German Barria, Bob Bernoteit, Michelle Bublitz, Bill Marr, and James Burris dated June 22, 2022 through July 21, 2022
R2563 – R2566:	Emails between Bill Marr, Michelle Bublitz, German Barria, James Burris dated June 22, 2022 through July 21, 2022
R2567 – R2570:	Emails between Michelle Nunlitz, Bill Marr, German Barria, and James Burris dated June 22, 2022 through July 22, 2022
R2571 – R2574:	Emails between Bill Marr, Michelle Bublitz, German Barria, and James Burris dated June 22, 2022 through July 22, 2022
R2575 – R2636:	Email from German Barria to Bob Bernoteit dated July 22, 2022 and attachments
R2637 – R2698:	Emails between Bob Bernoteit and German Barria dated July 22, 2022 and attachments
R2699 – R2735:	Emails between Michelle Bublitz, German Barria, and James Burris dated June 22, 2022 through July 27, 2022 and attachments
R2736 – R2863:	Emails between Michelle Bublitz, German Barria, James Burris, Bob Bernoteit, and Bill Marr dated June 22, 2022 through July 27, 2022 and attachments
R2864 – R2867:	Emails between German Barria, Michelle Bublitz, and James Burris dated June 22, 2022 through July 27, 2022
R2868 – R2873:	Emails between German Barria, Michelle Bublitz, and James Burris dated June 22, 2022 through July 29, 2022
R2874 – R2912:	Email from German Barria to Bob Bernoteit dated August 1, 2022 and attachments
R2913 – R2951:	Emails between German Barria and Bob Bernoteit dated August 1, 2022 and attachments
R2952:	Emails between Bob Bernoteit and German Barria dated August 1, 2022

R2953 – R2991:	Email from German Barria to Trent Nation dated August 4, 2022 and attachments
R2992 – R3030:	Email from Trent Nation to German Barria dated August 4, 2022 and attachments
R3031 – R3036:	Emails between German Barria, Bob Bernoteit, Bill Marr, Michelle Bublitz, and James Burris dated June 22, 2022 through August 5, 2022
R3037 – R3042:	Emails between Bob Bernoteit, German Barria, Bill Marr, Michelle Bublitz, and James Burris dated June 22, 2022 through August 5, 2022
R3043 – R3048:	Emails between Bill Marr, Bob Bernoteit, German Barria, Michelle Bublitz, and James Burris dated June 22, 2022 through August 5, 2022
R3049 – R3099:	Email from German Barria to Cassandra Metz dated August 5, 2022 with attachments
R3100 – R3101:	Email from Cassandra Metz to German Barria dated August 5, 2022 with attachment
R3102 – R3104:	Emails between German Barria and Cassandra Metz dated August 5, 2022 with attachment
R3105 – R3106:	Email from Cassandra Metz to Chris Kjellmark, Kristin Hart, John Finke, Kendall Hale, James Morse, and Rex Lane dated August 5, 2022 with attachment
R3107– R3108:	Emails between German Barria, Bob Bernoteit Bill Marr, Cassandra Metz, Chris Kjellmark, Kristin Hart, John Finke, Kendall Hale, James Morse, and Rex Lane dated August 5, 2022 with attachment
R3109 – R3115:	Emails between German Barria, Michelle Bublitz, and James Burris dated June 22, 2022 through August 5, 2022 (excluding attachment not related to FESOP 96020027)
R3116 – R3125:	Construction Permit No. 22040008 issued August 5, 2022
R3126 – R3127:	Emails between Cassandra Metz and James Burris dated August 31, 2022
R3128 – R3129:	Emails between German Barria, Bob Bernoteit, Cassandra Metz, and James Burris dated August 31, 2022
R3130 – R3131:	Emails between German Barria, Bob Bernoteit, Cassandra Metz, James Burris, and Bill Marr dated August 31, 2022
R3132 – R3137:	Bunge Comments on Public Notice FESOP dated September 2, 2022

R3138 – R3168:	Emails between Cassandra Metz, German Barria, Bob Bernoteit, Bill Marr, Brad Frost, and James Burris dated August 31, 2022 through September 6, 2022 and attachments
R3169 – R3179:	Calculation Sheet
R3180-R3264:	Email from German Barria to Bob Bernoteit dated December 29, 2022 and attachments
R3265:	Email from EJRequest@illinois.gov to Cassandra Metz, Brad Frost, Chris Pressnall, Alane Herr, James Mensah, and German Barria dated December 29, 2022
R3266:	Email from EJRequest@illinois.gov to Cassandra Metz, Brad Frost, Chris Pressnall, Alane Herr, James Mensah, and German Barria dated December 29, 2022
R3267 – R3305:	Emails between Bob Bernoteit and German Barria dated December 29, 2022 and attachments
R3306 – R3313:	Emails between Bob Bernoteit and German Barria dated December 29, 2022 and attachments
R3314 – R3315:	Emails between Bob Bernoteit and German Barria dated December 29, 2022
R3316 – R3319:	Emails between Bob Bernoteit and German Barria dated December 29, 2022
R3320 – R3322:	Emails between Bob Bernoteit and German Barria dated December 29, 2022
R3323 – R3324:	Emails between German Barria, Bob Bernoteit, Anupama Paruchuri, Vikash Bhakta, Bart Rovey, and Kim Kras dated January 3 and 4, 2023
R3325 – R3326:	Emails between German Barria, Bob Bernoteit, Anupama Paruchuri, Vikash Bhakta, Bart Rovey, and Kim Kras dated January 3 and 4, 2023
R3327 – R3328:	Emails between German Barria, Bob Bernoteit, Anupama Paruchuri, Vikash Bhakta, Bart Rovey, and Kim Kras dated January 3 and 4, 2023
R3329 – R3332:	Email from German Barria to James Burris dated January 4, 2023
R3333 – R3334	Emails between Bob Bernoteit, Cassandra Metz, German Barria, and James Burris dated January 4, 2023
R3335 – R3370:	FESOP issued January 4, 2023
R3371 – R3372:	List of addresses for public notice
R3373 – R3383:	Project Summary

I, German Barria, of the Illinois EPA, hereby certify that the documents of the Record on Appeal filed in the above referenced matter and summarized in the above Index are complete to the best of my knowledge, information, and belief.

BY: /s/ German Barria
German Barria
Environmental Protection Specialist IV
Illinois Environmental Protection Agency

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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Dated: May 5, 2023

R000001

WASHINGTON, D.C. 20460

EC-6-1998-66

JUN 13 1989

MEMORANDUM

SUBJECT: Guidance on Limiting Potential to Emit in New Source Permitting

FROM: Terrell E. Hunt
Associate Enforcement Counsel
Air Enforcement Division
Office of Enforcement and Compliance Monitoring

John S. Seitz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Addressees

This memorandum transmits the final guidance on conditions in construction permits which can legally limit a source's potential to emit to minor or de minimis levels. We received many helpful comments on the January 24, 1989 draft of this guidance, and have incorporated the comments into the final document wherever possible. A summary of the major changes which have been made to the guidance in response to these comments is provided below.

Several commenters noted that the draft guidance used the term "federally enforceable" to mean both federally enforceable as defined in the new source regulations (40 C.F.R. §§ 52.21(b)(17), 51.165(a)(1)(xiv), 51.166(b)(17)), and enforceable as a practical matter. We have tried to distinguish the places where each term should be used, explained the relationship between the two terms, and indicated that in order to properly restrict potential to emit, limitations must be both federally enforceable as defined in the regulations and practically enforceable.

FEB 25 1998
ECDIC

Some commenters requested that the section on averaging times for production limits be more specific as to when it is appropriate to use limitations which exceed a one month time basis. We have tried to explain why it is not possible to develop generic criteria for making this distinction, and to indicate situations where exceptions to the policy that production and operation limitations not exceed one month may be warranted.

There were some requests for a section on enforcement. We have included a new Section VI which addresses this topic. We also received many good suggestions on the example permit limitations. The section on examples has been substantially reworked to reflect your comments.

Finally, we learned through the comments that in two specific circumstances, short term emission limits are the most useful and reasonable way to restrict and verify limits on potential to emit. These circumstances are: 1) when control equipment is installed but control equipment operating parameters are difficult to measure during enforcement inspections; and 2) in surface coating operations with numerous and unpredictable use of coatings containing varying VOC content, where add-on control equipment is not employed. Therefore, we have made a narrow exception to the flat prohibition on use of emission limits to restrict potential to emit for these specific circumstances, and only when certain additional conditions have been met.

Again, we appreciate the thoughtful comments we have received on this guidance. Please insert this document into your Clean Air Act Compliance/Enforcement Policy Compendium as Item Number H.3. If you have any questions, please contact Judith Katz in the Air Enforcement Division at FTS 382-2843, or Sally Farrell in the Stationary Source Compliance Division at FTS 382-2875.

Addressees:

Regional Counsels
Regions I-X

Regional Counsel Air Branch Chiefs
Regions I-X

Air Management Division Directors
Regions I, III, and IX

Air and Waste Management Division Director
Region II

LIMITING POTENTIAL TO EMIT IN NEW SOURCE PERMITTING

JUNE 13, 1989

AIR ENFORCEMENT DIVISION
OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING

STATIONARY SOURCE COMPLIANCE DIVISION
OFFICE OF AIR QUALITY PLANNING AND STANDARDS

Limiting Potential to Emit in New Source Permitting

I. Introduction

Whether a new source or modification is major and subject to new source review under Parts C and D of the Clean Air Act is dependent on whether that source or modification has or will have the potential to emit major or significant amounts of a regulated pollutant. Therefore, the definition of "potential to emit" under the new source regulations is extremely important in determining the applicability of new source review to a particular source. The federal regulations define "potential to emit" as:

> the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of fuel combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

40 C.F.R.§§ 52.21(b)(4), 51.165(a)(1)(iii), 51.166(b)(4).

Permit limitations are very significant in determining whether a source is subject to major new source review. This is because they are the easiest and most common way for a source to obtain restrictions on its potential to emit. A permit does not

have to be a major source permit to legally restrict potential emissions. A minor source construction permit issued pursuant to a state program approved by EPA as meeting the requirements of 40 C.F.R. § 51.160 is federally enforceable. In fact, any permit limitation can legally restrict potential to emit if it meets two criteria: 1) it is federally enforceable as defined by 40 C.F.R. §§ 52.21(b)(17), 51.165(a)(1)(xiv), 51.166(b)(17), i.e., contained in a permit issued pursuant to an EPA-approved permitting program or a permit directly issued by EPA, or has been submitted to EPA as a revision to a State Implementation Plan and approved as such by EPA; and 2) it is enforceable as a practical matter. The second criterion is an implied requirement of the first criterion. A permit requirement may purport to be federally enforceable, but, in reality cannot be federally enforceable if it cannot be enforced as a practical matter.

Non-permit limitations can also legally restrict potential to emit. These limitations include New Source Performance Standards codified at 40 C.F.R. Part 60 and National Emission Standards for Hazardous Air Pollutants codified at 40 C.F.R. Part 61.

The appropriate means of restricting potential to emit through permit conditions has been an issue in recent enforcement cases. Through these cases and through guidance issued by EPA, the Agency has addressed three questions: what types of permit

limitations can legally limit potential to emit; whether long averaging times for production limitations are enforceable as a practical matter; and whether sources may limit potential to emit to minor source levels as a means of circumventing the preconstruction review requirements of major source review.

II. The Louisiana-Pacific Case

In United States v. Louisiana-Pacific Corporation, 682 F. Supp. 1122 (D. Colo. Oct. 30, 1987) and 682 F. Supp. 1141 (D. Colo. March 22, 1988), Judge Alfred Arraj discussed the type of permit restrictions which can be used to limit a source's potential to emit. The Judge concluded that:

> ...not all federally enforceable restrictions are properly considered in the calculation of a source's potential to emit. While restrictions on hours of operation and on the amount of materials combusted or produced are properly included, blanket restrictions on actual emissions are not.

682 F. Supp. at 1133.

The Court held that Louisiana-Pacific's permit conditions which limited carbon monoxide emissions to 78 tons per year and volatile organic compounds to 101.5 tons per year should not be considered in determining "potential to emit" because these blanket emission limits did not reflect the type of permit conditions which restricted operations or production such as limits on hours of operation, fuel consumption, or final product.

The Louisiana-Pacific court was guided in its reasoni the D.C. Circuit's holding in Alabama Power v. Costle, 636 323 (D.C. Circuit 1979). Before Alabama Power, EPA regula required potential to emit to be calculated according to a source's maximum uncontrolled emissions. In Alabama Power D. C. Circuit remanded those regulations to EPA with instr that the Agency include the effect of in-place control equ in defining potential to emit. EPA went beyond the minimu dictates of the D.C. Circuit in promulgating revised regul in 1980 to include, in addition to control equipment, any federally enforceable physical or operational limitation. Louisiana-Pacific court found that blanket limits on emiss did not fit within the concept of proper restrictions on potential to emit as set forth by Alabama Power.

Moreover, Judge Arraj found that:

> ...a fundamental distinction can be drawn between t federally enforceable limitations which are express included in the definition of potential to emit and ...(emission) limitations.... Restrictions on hour operation or on the amount of material which may b combusted or produced ... are, relatively speaking easier to "federally enforce." Compliance with su conditions could be easily verified through the te officers, all manner of internal correspondence ar accounting, purchasing, and production records. contrast, compliance with blanket restrictions on emissions would be virtually impossible to verif enforce.

Id. Thus, Judge Arraj found that blanket emission l not enforceable as a practical matter.

Finally, the Court reasoned that allowing blanket emission limitations to restrict potential to emit would violate the intent of Congress in establishing the Prevention of Significant Deterioration (PSD) program.

III. Types of Limitations that will Restrict Potential to Emit

As an initial matter in this discussion, a few important terms should be defined. Emission limits are restrictions over a given period of time on the amount of a pollutant which may be emitted from a source into the outside air. Production limits are restrictions on the amount of final product which can be manufactured or otherwise produced at a source. Operational limits are all other restrictions on the manner in which a source is run, including hours of operation, amount of raw material consumed, fuel combusted, or conditions which specify that the source must install and maintain add-on controls that operate at a specified emission rate or efficiency. All production and operational limits except for hours of operation are limits on a source's capacity utilization. Potential emissions are defined as the product of a source's emission rate at maximum operating capacity, capacity utilization, and hours of operation.

To appropriately limit potential to emit consistent with the opinion in Louisiana-Pacific, all permits issued pursuant to 40 C.F.R. §§51.160, 51.166, 52.21 and 51.165 must contain a

production or operational limitation in addition to the emission limitation in cases where the emission limitation does not reflect the maximum emissions of the source operating at full design capacity without pollution control equipment. Restrictions on production or operation that will limit potential to emit include limitations on quantities of raw materials consumed, fuel combusted, hours of operation, or conditions which specify that the source must install and maintain controls that reduce emissions to a specified emission rate or to a specified efficiency level. Production and operational limits must be stated as conditions that can be enforced independently of one another. For example, restrictions on fuel which relates to both type and amount of fuel combusted should state each as an independent condition in the permit. This is necessary for purposes of practical enforcement so that, if one of the conditions is found to be difficult to monitor for any reason, the other may still be enforced.

When permits contain production or operational limits, they should also have recordkeeping requirements that allow a permitting agency to verify a source's compliance with its limits. For example, permits with limits on hours of operation or amount of final product should require an operating log to be kept in which the hours of operation and the amount of final product produced are recorded. These logs should be available

for inspection should staff of a permitting agency wish to check a source's compliance with the terms of its permit.

When permits require add-on controls operated at a specified efficiency level, permit writers should include, so that the operating efficiency condition is enforceable as a practical matter, those operating parameters and assumptions which the permitting agency depended upon to determine that the control equipment would have a given efficiency.

An emission limitation alone would limit potential to emit only when it reflects the absolute maximum that the source could emit without controls or other operational restrictions. When a permit contains no limits on capacity utilization or hours of operation, the potential to emit calculation should assume operation at maximum design or achievable capacity (whichever is higher) and continuous operation (8760 hours per year).

The particular circumstances of some individual sources make it difficult to state operating parameters for control equipment limits in a manner that is easily enforceable as a practical matter. Therefore, there are two exceptions to the absolute prohibition on using blanket emission limits to restrict potential to emit. If the permitting agency determines that setting operating parameters for control equipment is infeasible in a particular situation, a federally enforceable permit

containing short term emission limits (e.g. lbs per hour) would be sufficient to limit potential to emit, provided that such limits reflect the operation of the control equipment, and the permit includes requirements to install, maintain, and operate a continuous emission monitoring (CEM) system and to retain CEM data, and specifies that CEM data may be used to determine compliance with the emission limit.

Likewise, for volatile organic compound (VOC) surface coating operations where no add-on control is employed but emissions are restricted through limiting VOC contents and quantities of coatings used, emission limits may be used to restrict potential to emit under the following limited circumstances. If the permitting agency determines for a particular surface coating operation that operating and production parameters (e.g., gallons of coating, quantities produced) are not readily limited due to the wide variety of coatings and products and due to the unpredictable nature of the operation, emission limits coupled with a requirement to calculate daily emissions may be used to restrict potential to emit. The source must be required to keep the records necessary for this calculation, including daily quantities and the VOC content of each coating used. Emission limits may be used in this limited circumstance to restrict potential to emit since, in this case, emission limits are more easily enforceable than operating or production limits.

IV. Time Periods For Limiting Production and Operation

As discussed above, a limitation specifically recognized by the regulations as reducing potential to emit is a limitation on production or operation. However, for these limitations to be enforceable as a practical matter, the time over which they extend should be as short term as possible and should generally not exceed one month. This policy was explained in a March 13, 1987 memorandum from John Seitz to Bruce Miller, Region IV. The requirement for a monthly limit prevents the enforcing agency from having to wait for long periods of time to establish a continuing violation before initiating an enforcement action.

EPA recognizes that in some rare situations, it is not reasonable to hold a source to a one month limit. In these cases, a limit spanning a longer time is appropriate if it is a rolling limit. However, the limit should not exceed an annual limit rolled on a monthly basis. EPA cannot now set out all-inclusive categories of sources where a production limit longer than a month will be acceptable because every situation that may arise in the future cannot now be anticipated. However, permits where longer rolling limits are used to restrict production should be issued only to sources with substantial and unpredictable annual variation in production, such as emergency

boilers. Rolling limits could be used as well for sources which shut down or curtail operation during part of a year on a regular seasonal cycle, but the permitting authority should first explc the possibility of imposing a month-by-month limit. For example, if a pulp drier is periodically shut down from December to April, the permit could contain a zero hours of operation limit for each of those months, and then the appropriate hourly operation limit for each of the remaining months. Under no circumstances would a production or operation limit expressed on a calendar year annual basis be considered capable of legally restricting potential to emit.

V. Sham Operational Limits

In the past year, several sources have obtained purportedl federally enforceable permits with operating restrictions limiting their potential to emit to minor or de minimis levels for the purpose of allowing them to commence construction prior to receipt of a major source permit. In such cases where EPA can demonstrate an intent to operate the source at major source levels, EPA considers the minor source construction permit void ab initio and will take appropriate enforcement action to prevent the source from constructing or operating without a major source permit.

The following example illustrates the kind of situation addressed in this section: An existing major stationary source proposes to add a 12.5 megawatt electric utility steam generating unit, and applies for a federally enforceable minor source permit which restricts operation at the unit to 240 hours per year. Because the project is designed as a baseload facility, EPA does not believe that the source intends to operate the facility for only 240 hours a year. Further investigation would probably uncover documentation of the source's intent to operate at higher levels than those for which it is permitted.

This situation raises the question of whether a source can lawfully bypass the preconstruction or premodification review requirements of Prevention of Significant Deterioration (PSD) and nonattainment New Source Review by committing to permit conditions which restrict production to a level at which the source does not intend to operate for any extensive time. If, after constructing and commencing operation, the source obtains a relaxation of its original permit conditions prior to exceeding them, does this constitute a violation of the preconstruction review requirements? This section discusses why it is improper to construct a source with a minor source permit when there is intent to operate as a major source, and provides guidelines for identifying these "sham" permits.

A. Permits with conditions that do not reflect a source's planned mode of operation are void ab initio and cannot act to shield the source from the requirement to undergo preconstruct review.

1. Sham permits are not allowed by 40 CFR §52.21(r)(4)

Section 52.21(r)(4) states:

> At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980 on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then (PSD) shall apply to the source or modification as though construction had not yet commenced on the source or modification.

When a source that is minor because of operating restrictions in a construction permit later applies for a relaxation of that construction permit which would make the source major, Section 52.21(r)(4) prescribes the methodology f determining best available control technology (BACT). However, it does not foreclose EPA's ability, in addition to the retroactive application of BACT and other requirements of the PSD program, to pursue enforcement where the Agency believes that the initial minor source permit was a sham. EPA will limit its activity to requiring application of 40 CFR 52.21(r)(4) only for the cases where a source legitimately changes a project after finding that the operating restrictions which were taken in good faith cannot be complied with. Whether a source has acted in good faith is a factual question which is answered by available evidence in the particular case.

2. Sham permits are not allowed by the definition of potential to emit: 40 C.F.R. §§52.21(b)(4), 51.165(a)(1)(iii), 51.166(b)(4).

The definition of potential to emit enables sources to obtain federally enforceable permits with operational restrictions as a means of limiting emissions to minor source levels. However, implicit in the application of these limitations is the understanding that they comport with the true design and intended operation of the project.

3. Sham permits are not allowed by the Clean Air Act

Parts C and D of the Clean Air Act exhibit Congress's clear intent that new major sources of air pollution be subject to preconstruction review. The purposes for these programs cannot be served without this essential element. Therefore, attempts to expedite construction by securing minor source status through the receipt of operational restrictions from which the source intends to free itself shortly after operation are to be treated as circumvention of the preconstruction review requirements.

B. Guidelines for determining when minor source construction permits are shams.

EPA's determination that a purportedly federally enforceable construction permit is a sham is made based on an evaluation of specific facts and evidence in each individual case. The following are criteria which should be scrutinized when making such a determination:

1. Filing a PSD or nonattainment NSR permit application

If a major source or major modification permit application is filed simultaneously with or at approximately the same time as the minor source construction permit, this is strong evidence of an intent to circumvent the requirements of preconstruction review. Even a major source application filed after the minor source application, but either before operation has commenced or after less than a year of operation should be looked at closely.

2. Applications for funding

Applications for commercial loans or, for public utilities, bond issues, should be scrutinized to see if the source has guaranteed a certain level of operation which is higher than that in its construction permit. If the project would not be funded or if it would not be economically viable if operated on an

extended basis (at least a year) at the permitted level of production, this should be considered as evidence of circumvention.

3. Reports on consumer demand and projected production levels.

Stockholder reports, reports to the Securities and Exchange Commission, utility board reports, or business permit applications should be reviewed for projected operation or production levels. If reported levels are necessary to meet projected consumer demand but are higher than permitted levels, this is additional evidence of circumvention.

4. Statements of authorized representatives of the source regarding plans for operation.

Statements by representatives of the source to EPA or to state or local permitting agencies about the source's plans for operation can be evidence to show intent to circumvent preconstruction review requirements.

Note that if a determination is made that a permit is a "sham" for one pollutant and, therefore, the source is a major source or major modification, the permit may possibly still contain valid limits on potential to emit for other pollutants.

In such cases, the entire source must still go through new source review, during which, for PSD review, all pollutants for which there is a net significant increase must be analyzed for BACT. In nonattainment new source review, new sources must have LAER determinations only for pollutants for which they are major. Major modifications, however, must have LAER determinations for all nonattainment pollutants emitted in significant amounts. If the valid limits in a partially void minor source construction permit keep certain pollutants below significance levels, then those pollutants would not have to be analyzed for BACT or LAER. However, if a source or modification is determined to be major for PSD or NSR because part of its minor permit is deemed void, it would have to undergo BACT or LAER analysis for all significant pollutants.

VI. Enforcement Procedures

This guidance has discussed permit conditions which will legally restrict potential to emit, shielding a source from the requirement to comply with major new source permitting regulations. Failure by a permitting agency to adhere to these guidelines may result in a permit that does not legally restrict potential to emit, thereby subjecting a source to major new source review. If that source has not gone through preconstruction review, it is a significant violator of the Clean Air Act and is subject to enforcement for constructing or

modifying without a major new source permit.

The enforcement options available to EPA in these situations include administrative action under §§167 or 113(a)(5) of the Act or federal judicial action under §§ 113(b)(2), 113(b)(5), 113(c), or 167. Which enforcement option is selected depends on the facts of the particular situation. (See July 15, 1988 guidance on EPA Procedures for Addressing Deficient New Source Permits.)

VII. Examples

The following examples are provided to illustrate the type of permit restrictions which would and would not legally limit potential to emit to less than major source thresholds. These examples are provided for purposes of clarifying the potential to emit and averaging time guidance only. They are not intended to reflect all the permit conditions necessary for a valid permit. Specific test methods, compliance monitoring and recordkeeping and reporting requirements are necessary to make permit limitations enforceable as a practical matter. The use of examples where averaging times are the longest times allowed under EPA policies is not intended to necessarily condone the selection of the longest averaging times; averaging times should in practice be as short as possible.

1. The minor source construction permit for a boiler contains the following restrictions: 250,000 gal fuel/month; 0.8% S fuel; 8000 hours/year.

These conditions are federally enforceable production and operation limits, but do not limit potential to emit because one of them does not meet EPA policies on enforceability as a practical matter. The averaging time for hours of operation, one of the operational limits necessary to restrict emissions to less than 250 tpy, exceeds a monthly or rolling yearly limit. If, instead of 8000 hours/year, the hourly restriction were stated as 666 hours/month, the permit would serve to keep the source a minor source, assuming the permit contains appropriate recordkeeping provisions.

2. A waferboard plant which has the physical capacity to emit over 300 tpy of carbon monoxide in the absence of using specific combustion techniques has the following permit restriction as the sole emission limitation: 249 tpy.

This does not limit potential to emit since an operational or production restriction is necessary for the source to be restricted to 249 tpy. The permit must contain a restriction on hours of operation or capacity utilization which, when multiplied by the maximum emission rate for the CO sources at the plant, results in emissions of 249 tpy. Additionally, while the

emission limit alone cannot restrict potential to emit, the emission limit is unenforceable as a practical matter since it is limited on an annual basis. The permit should contain a short term emission limit (in addition to the annual emission limit), consistent with the compliance period or parameter in the applicable test method for determining compliance.

3. A small scale rock crushing plant that cannot emit more than 240 tpy under maximum operation without controls (including plant-wide particulate emissions from transfer and storage operations) has the following permit restriction as the sole emission limitation: 240 tpy particulate matter.

Since no operational limitations are necessary for the source to emit below 250 tpy, no operational restrictions need be in the permit to limit potential to emit. However, although this is not a major source, the state agency should express the emission limit in this permit as a lb/hour measure or gr/dscf so that it will be enforceable as a practical matter.

4. A plant consisting solely of a small rock crusher has the following permit restrictions: 0.05 lb gr PM/dscf; fabric filter must be employed and maintained at 99% efficiency.

Assuming that maintaining the fabric filter at 99% efficiency will result in emissions of less than 250 tpy, this

permit would limit potential to emit if it also contained either 1) parameters that allowed the permitting agency to verify the fabric filter's operating efficiency or 2) a requirement to install and operate continuous opacity monitors (COMs) and a specification that COM data may be used to verify compliance with emission limits. Note that if this second alternative were adopted, it would not be necessary to require that the fabric filter be maintained at 99% efficiency.

To determine potential to emit, the efficiency rate of the fabric filter would be multiplied by the maximum uncontrolled emission rate, the maximum number of operating hours and maximum throughput capacity since there are no other operating or production limits. However, the efficiency rate of the fabric filter would not be enforceable as a practical matter unless there were an enforceable means to monitor ESP performance on a short term basis. The two alternatives mentioned above would satisfy this requirement.

5. A surface coating operation has the capability of utilizing 15,000 gal coating/month, with the following permit restrictions: 3.0 lb VOC/gal coating minus water; 20.5 tons VOC/month; monthly VOC emissions to be determined from records of the daily volumes of coatings used times the manufacturers specified VOC content.

This does not limit potential to emit since the source has the physical capacity to exceed 250 tpy of VOC, and the permit does not contain a production or an operational limitation. A monthly limit on gallons of coating used which when multiplied by 3.0 lb/gal equates to less than the 250 tpy threshold (e.g., 13,500 gallons/month), with appropriate recordkeeping, would generally be necessary to limit potential to emit. If, however, the permitting agency determines, due to the wide variety of coatings employed and products produced, that restrictions on operation or production are not practically enforceable, then the above emission limits could restrict potential to emit if there are requirements that the source calculate emissions daily, and keep the appropriate records.

If the source was alternatively to meet the 20.5 ton/month limit by employing add-on controls, the permit would need to contain an operational limit, such as the requirement to install and operate an incinerator at 99% efficiency. A requirement to monitor incinerator efficiency (either directly or indirectly via temperature monitoring for example), and appropriate recordkeeping requirements to verify compliance with each of the permit conditions would also be necessary to make the permit conditions enforceable as a practical matter. Note, however, that in the case where add-on controls are employed, the source may be able to meet a shorter term emission limit than the ton per month figure.

VIII. Conclusion

We hope this guidance will help EPA Regions identify sou which have the potential to emit major amounts of an air pollutant which will subject those sources to the requirements of preconstruction new source review. Every source which is subject to these requirements but has not obtained a major new source permit should be seriously considered for enforcement action.

D R A F T
OCTOBER 1990

New Source Review Workshop Manual

Prevention of Significant Deterioration and Nonattainment Area Permitting

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PREFACE

This document was developed for use in conjunction with new source review workshops and training, and to guide permitting officials in the implementation of the new source review (NSR) program. It is not intended to be an official statement of policy and standards and does not establish binding regulatory requirements; such requirements are contained in the regulations and approved state implementation plans. Rather, the manual is designed to (1) describe in general terms and examples the requirements of the new source regulations and pre-existing policy; and (2) provide suggested methods of meeting these requirements, which are illustrated by examples. Should there be any apparent inconsistency between this manual and the regulations (including any policy decisions made pursuant to those regulations), such regulations and policy shall govern. This document can be used to assist those people who may be unfamiliar with the NSR program (and its implementation) to gain a working understanding of the program.

The focus of this manual is the prevention of significant deterioration (PSD) portion of the NSR program found in the Federal Regulations at 40 CFR 52.21. It does not necessarily describe the specific requirements in those areas where the PSD program is conducted under a state implementation plan (SIP) which has been developed and approved in accordance with 40 CFR 51.166. The reader is cautioned to keep this in mind when using this manual for general program guidance. In most cases, portions of an approved SIP that are different from those described in this manual will be more restrictive. Consequently, it is suggested that the reader also obtain program information from a State or local agency to determine all requirements that may apply in a area.

The examples presented in this manual are presented for illustration purposes only. They are fictitious and are designed to impart a basic understanding of the NSR regulations and requirements.

A number of terms and acronyms used in this manual have specific meanings within the context of the NSR program. Since this manual is intended for use by those persons generally familiar with NSR these terms are used throughout this document, often without definition. To aid users of the document who are unfamiliar with these terms, general definitions of these terms can be found in Appendix A. The specific regulatory definitions for most of the terms can be found in 40 CFR 52.21. Should there be any apparent inconsistency between the definitions contained in Appendix A and the regulatory definitions or requirements found in Part 40 of the Code of Federal Regulations (including any policy decisions made pursuant to those regulations), the regulations and policy decisions shall govern.

MANUAL ORGANIZATION

The manual is organized into three parts. Part I contains five chapters (Chapters A - E) covering the PSD program requirements. Chapter A describes the PSD applicability criteria and process used to determine if a proposed new or modified stationary source is required to obtain a PSD permit. Chapter B discusses the process by which best available control technology (BACT) is determined for new or modified emissions units. Chapter C discusses the PSD air quality analysis used to demonstrate that the proposed construction will not cause or contribute to a violation of any applicable National Ambient Air Quality Standard or PSD increment. Chapter D discusses the PSD additional impacts analyses which assess the impact of air, ground, and water pollution on soils, vegetation, and visibility caused by an increase in emissions at the subject source. Chapter E identifies class I areas, describes the procedures involved in preparing and reviewing a permit application for a proposed source with potential class I area air quality impacts.

Part II of the manual (Chapters F and G) covers the nonattainment area (NAA) permit program requirements for new major sources and major modifications. Chapter F describes the NAA applicability criteria for new or modified stationary sources locating in a nonattainment area. Chapter G provides a basic overview of the NAA preconstruction review requirements.

Part III (Chapters H and I) covers the major source permit itself. Chapter H discusses the elements of an effective and enforceable permit. Chapter I discusses permit drafting.

D R A F T
OCTOBER 1990

CHAPTER H

ELEMENTS OF AN EFFECTIVE PERMIT

I. INTRODUCTION

An effective permit is the legal tool used to establish all the source limitations deemed necessary by the reviewing agency during review of the permit application, as described in Parts I and II of this manual, and is the primary basis for enforcement of NSR requirements. In essence, the permit may be viewed as an extension of the regulations. It defines as clearly as possible what is expected of the source and reflects the outcome of the permit review process. A permit may limit the emissions rate from various emissions units or limit operating parameters such as hours of operation and amount or type of materials processed, stored, or combusted. Operational limitations frequently are used to establish a new potential to emit or to implement a desired emissions rate. The permit must be a "stand-alone" document that:

- identifies the emissions units to be regulated;
- establishes emissions standards or other operational limits to be met;
- specifies methods for determining compliance and/or excess emissions, including reporting and recordkeeping requirements; and
- outlines the procedures necessary to maintain continuous compliance with the emission limits.

To achieve these goals, the permit, which is in effect a contract between the source and the regulatory agency, must contain specific, clear, concise, and enforceable conditions.

This part of the manual gives a brief overview of the development of a permit, which ensures that major new sources and modifications will be constructed and operated in compliance with the applicable new source review (NSR) regulations [including prevention of signification deterioration (PSD)

and nonattainment area (NAA) review], new source performance standards (NSPS), national emissions standards for hazardous air pollutants (NESHAP), and applicable state implementation plan (SIP) requirements. In particular, a permit contains the specific conditions and limitations which ensure that:

- an otherwise major source will remain minor;
- all contemporaneous emissions increases and decreases are creditable and federally-enforceable; and
- where appropriate, emissions offset transactions are documented clearly and offsets are real, creditable, quantifiable, permanent and federally-enforceable.

For a more in-depth study, refer to the Air Pollution Training Institute (APTI) course SI 454 (or Workshop course 454 given by APTI) entitled "Effective Permit Writing." This course is highly recommended for all permit writers and reviewers.

II. TYPICAL CONSTRUCTION PERMIT ELEMENTS

While each final permit is unique to a particular source due to varying emission limits and specific special terms and conditions, every permit must also contain certain basic elements:

- legal authority;
- technical specifications;
- emissions compliance demonstration;
- definition of excess emissions;
- administrative procedures; and
- other specific conditions.

Although many of these elements are inherent in the authority to issue permits under the SIP, they must be explicit within the construction of a NSR permit. Table H-1 lists a few typical subelements found in each of the above. Some permit conditions included in each of these elements can be considered standard permit conditions, i.e., they would be included in nearly every permit. Others are more specific and vary depending on the individual source.

II.A. LEGAL AUTHORITY

In general, the first provision of a permit is the specification of the legal authority to issue the permit. This should include a reference to the enabling legislation and to the legal authority to issue and enforce the conditions contained in the permit and should specify that the application is, in essence, a part of the permit. These provisions are common to nearly all permits and usually are expressed in standard language included in every permit issued by an agency. These provisions articulate the contract-like nature of a permit in that the permit allows a source to emit air pollution only if certain conditions are met. A specific citation of any applicable

TABLE H 1. SUGGESTED MINIMUM CONTENTS OF AIR EMISSION PERMITS

Permit Category	Typical Elements
Legal Authority	Basis--statute, regulation, etc. Conditional Provisions Effective and expiration dates
Technical Specifications	Unit operations covered Identification of emission units Control equipment efficiency Design/operation parameters Equipment design Process specifications Operating/maintenance procedures Emission limits
Emission Compliance Demonstration	Initial performance test and methods Continuous emission monitoring and methods Surrogate compliance measures - process monitoring - equipment design/operations - work practice
Definition of Excess Emissions	Emission limit and averaging time Surrogate measures Malfunctions and upsets Follow-up requirements
Administrative	Recordkeeping and reporting procedures Commence/delay construction Entry and inspections Transfer and severability
Other Conditions	Post construction monitoring Emissions offset

permit effective date and/or expiration date is usually included under the legal authority as well.

II.B. TECHNICAL SPECIFICATIONS

Overall, the technical specifications may be considered the core of the permit in that they specifically identify the emissions unit(s) covered by the permit and the corresponding emission limits with which the source must comply. Properly identifying each emissions unit is important so that (1) inspectors can easily identify the unit in the field and (2) the permit leaves no question as to which unit the various permit limitations and conditions apply. Identification usually includes a brief description of the source or type of equipment, size or capacity, model number or serial number, and the source's identification of the unit.

Emissions and operational limitations are included in the technical specifications and must be clearly expressed, easily measurable, and allow no subjectivity in their compliance determinations. All limits also must be indicated precisely for each emissions point or operation. For clarity, these limits are often best expressed in tabular rather than textual form. In general, it is best to express the emission limits in two different ways, with one value serving as an emissions cap (e.g., lbs/hr.) and the other ensuring continuous compliance at any operating capacity (e.g., lbs/MMBtu). The permit writer should keep in mind that the source must comply with <u>both</u> values to demonstrate compliance. Such limits should be of a short term nature, continuous and enforceable. In addition, the limits should be consistent with the averaging times used for dispersion modeling and the averaging times for compliance testing. Since emissions limitation values incorporated into a permit are based on a regulation (SIP, NSPS, NESHAP) or resulting from new source review, (i.e., BACT or LAER requirements), a reference to the applicable portion of the regulation should be included.

II.C. EMISSIONS COMPLIANCE DEMONSTRATION

The permit should state how compliance with each limitation will be determined, and include, but is not limited to, the test method(s) approved for demonstrating compliance. These permit compliance conditions must be very clear and enforceable as a practical matter (see Appendix C). The conditions must specify:

- when and what tests should be performed;
- under what conditions tests should be performed;
- the frequency of testing;
- the responsibility for performing the test;
- that the source be constructed to accommodate such testing;
- procedures for establishing exact testing protocol; and
- requirements for regulatory personnel to witness the testing.

Where continuous, quantitative measurements are infeasible, surrogate parameters must be expressed in the permit. Examples of surrogate parameters include: mass emissions/opacity correlations, maintaining pressure drop across a control (e.g., venturi throat of a scrubber), raw material input/mass emissions output ratios, and engineering correlations associated with specific work practices. These alternate compliance parameters may be used in conjunction with measured test data to monitor continuous compliance or may be independent compliance measures where source testing is not an option and work practice or equipment parameters are specified. Only those parameters that exhibit a correlation with source emissions should be used. Identifying and quantifying surrogate process or control equipment parameters (such as pressure drop) may require initial source testing or may be extracted from confirmed design characteristics contained in the permit application.

Parameters that must be monitored either continuously or periodically should be specified in the permit, including averaging time for continuously monitored data, and data recording frequency for periodically (continually) monitored data. The averaging times should be of a short term nature

consistent with the time periods for which dispersion modeling of the respective emissions rate demonstrated compliance with air quality standards, and consistent with averaging times used in compliance testing. This requirement also applies to surrogate parameters where compliance may be time-based, such as weekly or monthly leak detection and repair programs (also see Appendix C). Whenever possible, "never to be exceeded" values should be specified for surrogate compliance parameters. Also, operating and maintenance (O&M) procedures should be specified for the monitoring instruments (such as zero, span, and other periodic checks) to ensure that valid data are obtained. Parameters which must be monitored continuously or continually are those used by inspectors to determine compliance on a real-time basis and by source personnel to maintain process operations in compliance with source emissions limits.

II.D. DEFINITION OF EXCESS EMISSIONS

The purpose of defining excess emissions is to prevent a malfunction condition from becoming a standard operating condition by requiring the source to report and remedy the malfunction. Conditions in this part of the permit:

- precisely define excess emissions;
- outline reporting requirements;
- specify actions the source must take; and
- indicate time limits for correction by the source.

Permit conditions defining excess emissions may include alternate conditions for startup, shutdown, and malfunctions such as maximum emission limits and operational practices and limits. These must be as specific as possible since such exemptions can be misused. Every effort should be made to include adequate definitions of both preventable and nonpreventable malfunctions. Preventable malfunctions usually are those which cause excess emissions due to negligent maintenance practices. Examples of preventable malfunctions may include: leakage or breakage of fabric filter bags; baghouse seal ruptures; fires in electrostatic precipitators due to excessive build up of oils or other flammable materials; and failure to monitor and replace spent activated carbon beds in carbon absorption units. These examples reinforce the need for good O&M plans and keeping records of all repairs. Permit requirements concerning malfunctions may include: timely reporting of the malfunction duration, severity, and cause; taking interim and corrective actions; and taking actions to prevent recurrence.

II.E. ADMINISTRATIVE PROCEDURES

The administrative elements of permits are usually standard conditions informing the source of certain responsibilities. These administrative procedures may include:

- recordkeeping and reporting requirements, including all continuous monitoring data, excess emission reports, malfunctions, and surrogate compliance data;
- notification requirements for performance tests, malfunctions, commencing or delay of construction;
- entry and inspection procedures;
- the need to obtain a permit to operate; and
- specification of procedures to revoke, suspend, or modify the permit.

Though many of these conditions will be entered into the permit via standard permit conditions, the reviewer must ensure the language is adequate to establish precisely what is expected or needed from the source, particularly the recordkeeping requirements.

II. F. OTHER CONDITIONS

In some cases, specific permit conditions which do not fit into the above elements may need to be outlined. Examples of these are conditions requiring: the permanent shutdown of (or reduced emissions rates for) other emissions units to create offsets or netting credits; post-construction monitoring; continued Statewide compliance; and a water truck to be dedicated solely to a haul road. In the case of a portable source, a condition may be included to require a copy of the effective permit to be on-site at all times. Some O&M procedures, such as requiring a 10 minute warmup for an incinerator, would be included in this category, as well as conditions requiring that replacement fabric filters and baghouse seals be kept available at all times. Any source-specific condition which needs to be included in the permit to ensure compliance should be listed here.

III. SUMMARY

Assuming a comprehensive review, a permit is only as clear, specific, and effective as the conditions it contains. As such, Table H-2 on the following page lists guidelines for drafting actual permit conditions. The listing specifies how typical permit elements should be written. For further discussion on drafting "federally enforceable" permit conditions as a practical matter, please refer to Appendix C - "Potential to Emit."

TABLE H.2. GUIDELINES FOR WRITING EFFECTIVE SPECIFIC CONDITIONS IN NSR PERMITS

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1. Make each permit condition ***simple, clear***, and ***specific*** such that it "stands alone."

2. Make certain ***legal authority*** exists to specify conditions.

3. Permit conditions should be ***objective*** and ***meaningful***.

4. Provide description of ***processes, emissions units*** and ***control equipment*** covered by the permit, including operating rates and periods.

5. Clearly ***identify each permitted emissions unit*** such that it can be located in the field.

6. Specify allowable emissions (or concentration, etc.) rates for ***each pollutant and emissions unit*** permitted, and specify each applicable emissions standard by name in the permit.

7. Allowable emissions rates should reflect the conditions of ***BACT/LAER*** and ***Air Quality Analyses*** (e.g., specify limits two ways: maximum mass/unit of process ***and*** maximum mass/unit time)

8. Specify for all emissions units (especially fugitive sources) permit conditions that require ***continuous application of BACT/LAER*** to achieve maximum degree of emissions reduction.

9. Initial and subsequent performance tests should be conducted at worst case operating (non-malfunction) conditions for all emissions units. Performance tests should determine ***both emissions and control equipment efficiency***.

10. Continual and continuous ***emissions performance monitoring*** and recordkeeping (direct and/or surrogate) should be specified where feasible.

11. Specify ***test method*** (citation) and ***averaging period*** by which all compliance demonstrations (initial and continuous) are to be made.

12. Specify what ***conditions*** constitute ***"excess emissions,"*** and what is to be done in those cases.

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CHAPTER I
PERMIT DRAFTING

I. RECOMMENDED PERMIT DRAFTING STEPS

This section outlines a recommended five-step permit drafting process (see Table I-1). These steps can assist the writer in the orderly preparation of air emissions permits following technical review.

Step 1 concerns the emissions units and requires the listing and specification of three things. First, list each new or modified emissions unit. Second, specify each associated emissions point. This includes fugitive emissions points (e.g., seals, open containers, inefficient capture areas, etc.) and fugitive emissions units (e.g., storage piles, materials handling, etc.). Be sure also to note emissions units with more than one ultimate exhaust and units sharing common exhausts. Third, the writer must describe each emissions unit as it may appear in the permit and identify, as well as describe, each emissions control unit. Each new or modified emissions unit identified in Step 1 that will emit or increase emissions of any pollutant is considered in Step 2.

Step 2 requires the writer to specify each pollutant that will be emitted from the new or modified source. Some pollutants may not be subject to regulation or are of de minimis amounts such that they do not require major source review. All pollutants should be identified in this step and reviewed for applicability. Federally enforceable conditions must be identified for de minimis pollutants to ensure they do not become significant (see Appendix C - Potential to Emit). An understanding of "potential to emit" is pertinent to permit review and especially to the drafting process.

TABLE I-1. FIVE STEPS TO PERMIT DRAFTING

STEP 1. SPECIFY EMISSIONS UNITS

- Identify each new (or modified) emissions unit that will emit (or increase) any pollutant.
- Identify any pollutant and emissions units involved in a netting or emissions reduction proposal (i.e., all contemporaneous emissions increases and decreases).
- Include point and fugitive emissions units.
- Identify and describe emissions unit and emissions control equipment.

STEP 2. SPECIFY POLLUTANTS

- Pollutants subject to NSR/PSD.
- Pollutants not subject to NSR/PSD but could reasonably be expected to exceed significant emissions levels. Identify conditions that ensure de minimis (e.g., shutdowns, operating modes, etc..).

STEP 3. SPECIFY ALLOWABLE EMISSION RATES AND BACT/LAER REQUIREMENTS

- Minimum number of allowable emissions rates specified is equal to at least two limits per pollutant per emissions unit.
- One of two allowable limits is unit mass per unit time (lbs/hr) which reflects application of emissions controls at maximum capacity.
- Maximum hourly emissions rate must correspond to that used in air quality analysis.
- Specify BACT/LAER emissions control requirements for each pollutant/emissions unit pair.

TABLE I-1. - Continued

STEP 4. SPECIFY COMPLIANCE DEMONSTRATION METHODS

- Continuous, direct emission measurement is preferable.
- Specify initial and periodic emissions testing where necessary.
- Specify surrogate (indirect) parameter monitoring and recordkeeping where direct monitoring is impractical or in conjunction with tested data.
- Equipment and work practice standards should complement other compliance monitoring.

STEP 5. OTHER PERMIT CONDITIONS

- Establish the basis upon which permit is granted (legal authority).
- Should be used to minimize "paper" allowable emissions.
- Federally enforceable permit conditions limiting potential to emit.

Step 3 pools the data collected in the two previous steps. The writer should specify the pollutants that will be emitted from each emission unit and identify associated emission controls for each pollutant and/or emission unit. (Indicate if the control has been determined to be BACT.) The writer also must assess the minimum number of allowable emissions rates to be specified in the permit. Each emissions unit should have at least two allowable emissions rates for each pollutant to be emitted. This is the most concise manner in which to present permit allowables and should be consistent with the averaging times and emissions ratio used in the air quality analysis. As discussed earlier in Section H, the applicable regulation should also be cited as well as whether BACT, LAER, or other SIP requirements apply to each pollutant to be regulated.

Step 4 essentially mirrors the items discussed in the previous Chapter H, Section IV., Emissions Compliance Demonstration. At this point the writer enters into the permit any performance testing required of the source. The conditions should specify what emissions test is to be performed and the frequency of testing. Any surrogate parameter monitoring must be specified. Recordkeeping requirements and any equipment and work practice standards needed to monitor the source's compliance should be written into the permit in Step 4. Any remaining or additional permit conditions, such as legal authority and conditions limiting potential to emit can be identified in ***Step 5***. (Other Permit Conditions, see Table I-1.) At this point, the permit should be complete. The writer should review the draft to ensure that the resultant permit is an effective tool to monitor and enforce source compliance. Also, the compliance inspector should review the permit to ensure that the permit conditions are enforceable as a practical matter.

II. PERMIT WORKSHEETS AND FILE DOCUMENTATION

Some agencies use permit drafting worksheets to store all the required information that will be incorporated into the permit. The worksheets may be helpful and are available at various agencies and in other EPA guidance documents. The worksheets serve as a summary of the review process, though this summation should appear in the permit file with or without a worksheet. Documenting the permit review process in the file cannot be overemphasized. The decision-making process which leads to the final permit for a source must be clearly traceable through the file. When filing documentation, the reviewer must also be aware of any confidential materials. Many agencies have special procedures for including confidential information in the permit file. The permit reviewer should follow any special procedures and ensure the permit file is documented appropriately.

III. SUMMARY

Listed below are summary "helpful hints" for the permit writer, which should be kept in mind when reviewing and drafting the permit. Many of these have been touched on throughout Part III, but are summarized here to help ensure that they are not overlooked:

- Document the review process throughout the file.
- Be aware of confidentiality items, procedures, and the consequences of the release of such information.
- Ensure the application includes all pertinent review information (e.g., has the applicant identified solvents used in some coatings; are solvents used, then later recovered; ultimate disposal of collected wastes identified; and applicable monitoring and modeling results included).
- Address secondary pollutant formation.
- Ensure that all applicable regulations and concerns have been addressed (e.g., BACT, LAER, NSPS, NESHAP, non-regulated toxics, SIP, and visibility).

- Ensure the permit is organized well, e.g., conditions are independent of one another, and conditions are grouped so as not be cover more than one area at a time.

- Surrogate parameters listed are clear and obtainable.

- Emissions limits are clear. In cases of multiple or common exhaust, limits should specify if per emissions unit or per exhaust.

- Every permit condition is 1) reasonable, 2) meaningful, 3) monitorable, and 4) always enforceable as a practical matter.

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OCTOBER 1990

APPENDIX C[7]

POTENTIAL TO EMIT

Upon commencing review of a permit application, a reviewer must define the source and then determine how much of each regulated pollutant the source potentially can emit and whether the source is major or minor (nonmajor). A new source is major if its potential to emit exceeds the appropriate major emissions threshold, and a change at an existing major source is a major modification if the source's net emissions increase is "significant." This determination not only quantifies the source's emissions but dictates the level of review and applicability of various regulations and new source review requirements. The federal regulations, 40 CFR 52.21(b)(4), 51.165(a)(1)(iii), and 51.166(b)(4), define the "potential to emit" as:

"the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable."

In the absence of federally enforceable restrictions, the potential to emit calculations should be based on uncontrolled emissions at maximum design or achievable capacity (whichever is higher) and year-round continuous operation (8760 hours per year).

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[7] This Appendix is based largely on an EPA memorandum "Guidance on Limiting Potential to Emit in New Source Permitting," from Terrell E. Hunt, Office of Enforcement and Compliance Monitoring, and John S. Seitz, Office of Air Quality Planning and Standards, June 13, 1989.

When determining the potential to emit for a source, emissions should be estimated for individual emissions units using an engineering approach. These individual values should then be summed to arrive at the potential emissions for the source. For each emissions unit, the estimate should be based on the most representative data available. Methods of estimating potential to emit may include:

- Federally enforceable operational limits, including the effect of pollution control equipment;
- performance test data on similar units;
- equipment vendor emissions data and guarantees;
- test data from EPA documents, including background information documents for new source performance standards, national emissions standards for hazardous air pollutants, and Section 111(d) standards for designated pollutants;
- AP-42 emission factors;
- emission factors from technical literature; and
- State emission inventory questionnaires for comparable sources.

NOTE: Potential to emit values reflecting the use of pollution control equipment or operational restrictions are usable only to the extent that the unit/process under review utilizes the same control equipment or operational constraints and makes them federally enforceable in the permit.

Calculated emissions will embrace all potential, not actual, emissions expected to occur from a source on a continuous or regular basis, including fugitive emissions where quantifiable. Where raw materials or fuel vary in their pollutant-generating capacity, the most pollutant-generating substance must be used in the potential-to-emit calculations unless such materials are restricted by federally enforceable operational or usage limits. Historic usage rates alone are not sufficient to establish potential-to-emit.

Permit limitations are significant in determining a source's potential to emit and, therefore, whether the source is "major" and subject to new source review. Permit limitations are the easiest and most common way for a source to restrict its potential to emit. A source considered major, based on emission calculations assuming 8760 hours per year of operation, can often be considered minor simply by accepting a federally enforceable limitation restricting hours of operation to an actual schedule of, for example, 8 hours per day. A permit does not have to be a major source permit to legally restrict potential emissions. Minor source construction permits are often federally enforceable. Any limitation can legally restrict potential to emit if it meets three criteria: 1) it is federally enforceable as defined by 40 CFR 52.21(b)(17), 52.24(f)(12), 51.165(a)(1)(xiv), and 51.166(b)(17), i.e., contained in a permit issued pursuant to an EPA-approved permitting program or a permit directly issued by EPA, or has been submitted to EPA as a revision to a State Implementation Plan and approved as such by EPA; 2) it is enforceable as a practical matter; and (3) it meets the specific criteria in the definition of "potential to emit," (i.e., any physical or operational limitation on capacity, including control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed). The second criterion is an implied requirement of the first. A requirement may purport to be federally enforceable, but in reality cannot be federally enforceable if it cannot be enforced as a practical matter.

In the absence of dissecting the legal aspects of "federal enforceability," the permit writer should always assess the enforceability of a permit restriction based upon its practicability. Compliance with any limitation must be able to be established at any given time. When drafting permit limitations, the writer must always ensure that restrictions are written in such a manner that an inspector could verify instantly whether the source is or was complying with the permit conditions. Therefore, short-term averaging times on limitations are essential. If the writer does this, he or she can feel comfortable that limitations incorporated into a permit will be federally enforceable, both legally and practically.

The types of limitations that restrict potential to emit are emission limits, production limits, and operational limits. Emissions limits should reflect operation of the control equipment, be short term, and, where feasible, the permit should require a continuous emissions monitor. Blanket emissions limits alone (e.g., tons/yr, lb/hr) are virtually impossible to verify or enforce, and are therefore not enforceable as a practical matter. Production limits restrict the amount of final product which can be manufactured or produced at a source. Operational limits include all restrictions on the manner in which a source is run, e.g., hours of operation, amount of raw material consumed, fuel combusted or stored, or specifications for the installation, maintenance and operation of add-on controls operating at a specific emission rate or efficiency. All production and operational limits except for hours of operation are limits on a source's capacity utilization. To appropriately limit potential to emit consistent with a previous Court decision [United States v. Louisiana-Pacific Corporation, 682 F. Supp. 1122 (D. Colo. Oct. 30, 1987) and 682 F. Supp. 1141 (D. Colo. March 22, 1988)], all permits issued must contain a production or operational limitation in addition to the emissions limitation and emissions averaging time in cases where the emission limitation does not reflect the maximum emissions of the source operating at full design capacity without pollution control equipment. In the permit, these limits must be stated as conditions that can be enforced independently of one another. This emphasizes the idea of good organization when drafting permit conditions and is discussed in more detail in the Part III text. The permit conditions must be clear, concise, and independent of one another such that enforceability is never questionable.

When permits contain production or operational limits, they must also have requirements that allow a permitting agency to verify a source's compliance with its limits. These additional conditions dictate enforceability and usually take the form of recordkeeping requirements. For example, permits that contain limits on hours of operation or amount of final product should require use of an operating log for recording the hours of operation and the amount of final product produced. For organizational

purposes, these limitations would be listed in the permit separately and records should be kept on a frequency consistent with that of the emission limits. It should be specified that these logs be available for inspection should a permitting agency wish to check a source's compliance with the terms of its permit.

When permits require add-on controls operated at a specified efficiency level, the writer should include those operating parameters and assumptions upon which the permitting agency depended to determine that controls would achieve a given efficiency. To be enforceable, the permit must also specify that the controls be equipped with monitors and/or recorders measuring the specific parameters cited in the permit or those which ensure the efficiency of the unit as required in the permit. Only through these monitors could an inspector instantaneously measure whether a control was operating within its permit requirements and thus determine an emissions unit's compliance. It is these types of additional permit conditions that render other permit limitations practically and federally enforceable.

Every permit also should contain emissions limits, but production and operational limits are used to ensure that emissions limits expressed in the permit are not exceeded. Production limits are most appropriately expressed in the shortest time periods as possible and generally should not exceed 1 month (i.e., pounds per hour or tons per day), because compliance with emission limits is most easily established on a short term basis. An inspector, for example, could not verify compliance for an emissions unit with only monthly and annual production, operational or emission limits if the inspection occurred anytime except at the end of a month. In some rare situations a 1-month averaging time may not be reasonable. In these cases, a limit spanning a longer period is appropriate if it is a rolling average limit. However, the limit should not exceed an annual limit rolled on a monthly basis. Note also that production and operational recordkeeping requirements should be written consistent with the emissions limits. Thus, if an emissions unit was limited to a particular tons per day emissions rate,

then production records which monitor compliance with this limit should be kept on a daily basis rather than weekly.

One final matter to be aware of when calculating potential to emit involves identifying "sham" permits. A sham permit is a federally enforceable permit with operating restrictions limiting a source's potential to emit such that potential emissions do not exceed the major or de minimis levels for the purpose of allowing construction to commence prior to applying for a major source permit. Permits with conditions that do not reflect a source's ***planned*** mode of operation may be considered void and cannot shield the source from the requirement to undergo major source preconstruction review. In other words, if a source accepts operational limits to obtain a minor source construction permit but intends to operate the source in excess of those limitations once the unit is built, the permit is considered a sham. If the source originally intended or planned to operate at a production level that would make it a major source, and if this can be proven, EPA will seek enforcement action and the application of BACT and other requirements of the PSD program. Additionally, a permit may be considered a sham permit if it is issued for a number of pollution-emitting modules that keep the source minor, but within a short period of time an application is submitted for additional modules which will make the total source major. The permit writer must be aware of such sham permits. If an application for a source is suspected to be a sham, EPA enforcement and source personnel should be alerted so details may be worked out in the initial review steps such that a sham permit is not issued. The possibility of sham permits emphasizes the need, as discussed in the Part III text, to organize and document the review process throughout the file. This documentation may later prove to be evidence that a sham permit was issued, or may serve to refute the notion that a source was seeking a sham permit.

Overall, the permit writer should understand the extreme importance of potential to emit calculations. It must be considered in the initial review and continually throughout the review process to ensure accurate emission

limits that are consistent with federally enforceable production and operational restrictions.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 2046
FEB 24, 1992

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Use of Long Term Rolling Averages to Limit Potential to Emit

FROM: John B. Rasnic, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: David Kee, Director
Air and Radiation Division
Region V

This is in response to your memorandum dated September 17, 1991 and several other recent requests for clarification of the guidance entitled "Limiting Potential to Emit in New Source Permitting" (signed by Terrel Hunt and John Seitz, dated June 13, 1989). My staff met with your staff on these issues in October, 1991, and in response has surveyed the Regional offices for any additional suggestions for clarification of the policy. It was our understanding last fall that a direct response to your September memorandum would not be responsive to your needs. However, we have since determined that guidance on application of the "Potential to Emit Policy" to the nine source categories listed in your September 17 memorandum is warranted. To that end, this memorandum gives guidelines for determination of whether to allow long term rolling averages for the nine source categories.

Our survey of the Regions helped us to formulate our response regarding the nine source categories. As we have stated before, we believe that each case in which a source seeks to restrict its potential to emit by imposition of long-term production limits (i.e., limits that exceed one month) must be independently evaluated. Therefore, the facts of a specific case may lead to a different response, and the availability of a 12 month rolling average for the nine listed sources is not automatic. As you know, the potential to emit policy allows use of long-term rolling averages in any case where a source experiences "substantial and unpredictable" annual variations in production. Thus, it is the burden of the source to demonstrate the need for flexibility. In no event shall a source be allowed longer than an annual average rolled less frequently than a month.

General responses regarding the acceptability of long term averages for the nine source categories follows:

1. Agricultural production such as harvesting or food processing where part of a year the equipment is idle (sugar beet processing facilities).

Rolling averages have been allowed for seasonal food processors. 365 day rolling averages are appropriate given the uncertainties of operating schedules. Each case should be examined, however, for predictability, and alternative limits may be set that would not be as long as an annual rolling average. One option would be requiring a monthly production limit of zero for the off months, and a higher limit for the operating months.

2. Asphalt manufacturing in northern latitudes when there is no winter demand.

Units for which normal operating rates vary greatly (e.g., seasonal processes or batch mode operations) may be allowed longer averaging times. Such sources may be requested to document the historic unpredictability of their operations. Some regions do allow for longer averages where seasonal variations or climatological conditions affect the operation of the source. Any seasonal variations should be examined for predictability, and alternative limits may be set without using a longer averaging period. Again one option would be requiring a low production limit in the winter and higher production levels in the summer.

3. Emergency standby units.

This is a good example of a source that would qualify for a long term average. An emergency standby unit is the classic example of unpredictability.

4. Limit on oil usage in a boiler which can accommodate oil and natural gas but is on interruptable status during winter (commercial or institutional boilers).

Typically, this type of source may qualify for a longer rolling average. However, each case must be examined for predictability and it is recommended that sources demonstrate a history of unpredictable variations.

5. A printing press which has a surge in demand for Christmas season greeting cards.

Generally, this type of source may be able to predict such a seasonal increase in demand. However, if the source is able to demonstrate historical substantial unpredictability, it may be allowed a rolling average. You may also consider requiring a monthly average with higher monthly

production/operation in the busy season than in the off season, such that annual emissions are still below the applicability threshold.

6. Quarrying or mining activities which may be interrupted by winter weather.

Generally, this type of activity allows for use of a long term rolling average, unless it is determined that such interruptions are predictable.

7. Plants where there may be variations in production due to unpredictable orders or contracts.

Proof of historic substantial unpredictability should be provided to justify a long term rolling average.

8. Units used occasionally for testing new products or experimentation.

Generally, rolling averages may be allowed for this type of source. But again, this depends on the definition of "occasionally" for an individual plant.

9. Natural gas pipeline compressor stations with load variations depending on the seasonal variations in fuel demand in different parts of the network.

Unpredictable seasonable variations due to climatological conditions may very well support use of a long term rolling average.

When a determination is made that a rolling average is warranted due to substantial and unpredictable variation in production, the question of enforceability must be addressed. As we have discussed, a 365 day rolling average allows for short term enforceability of production or operation limits while allowing for long term data to be considered. When such a long term average is used, we believe that it is reasonable to require permit conditions which provide for interim limits that ensure compliance and enforceability during the first year. The method used to provide interim limits and the need to do so should be determined on a case by case basis, considering how close the allowable emissions would be to the applicability threshold, and how closely the enforcing agency believes monitoring is warranted for the particular source. You have indicated to us that some sources have suggested taking a requirement in the permit to use available data from the past year to average at the start of operations. This may weigh in favor of allowing a 365 day rolling average.

In response to your broader request for additional examples of how to apply the Potential to Emit Policy, we hope to discuss this issue at our annual NSR workshop. Our initial contact with other Regions indicated that the policy is adequate and allows sufficient flexibility for the permitting authority.

If you have any questions concerning our response, please contact Clara Poffenberger at FTS 678-8709.

cc: Gary McCutchen, NSR Section, AQMD (MD-15)
William L. MacDowell, Region V
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON. D.C. 20460

JAN 25 1995

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

SUBJECT: Guidance an Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits

FROM: Kathie A. Stein, Director
Air Enforcement. Division

TO: Director, Air and, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

Attached is a guidance document developed over the past year by the former Stationary Source compliance Division in coordination with the Air Enforcement Division, Office of Air Quality Planning and Standards$ OAR's Office of Policy Analysis and Review, and the Office of General Counsel, as well-as with significant input from several Regions.

A number of permitting authorities have begun discussions with or have submitted programs for review by EPA that would provide alternative mechanisms for limiting potential to emit Several authorities have submitted SIP rules and at least one State has been developing a state general permit approach.; We believe that this guidance is important to assist the EPA Regions as well as States in approving and developing such approaches.

For additional information regarding this guidance, please contact me or Clara Poffenberger of my staff at (202) 564-8709.

cc: John Rasnic, Director
Manufacturing, Energy, and Transportation Division Office of Compliance

Air Branch Chiefs, Regions I -X

Enforceability Requirements for Limiting potential to Emit Through SIP and §112 Rules and General Permits

Introduction

As several EPA guidance describe, there are several mechanisms available for sources to limit potential to emit. EPA guidance have also describe the importance of practical enforceability or the means used to limit the Potential to Emit. This guidance is intended to provide additional guidance on practical enforceability for such limits. We provide references for guidance an practical enforceability for permits and rules in general and provide guidance in this document for application of the same principles to "limitations established by rule or general permit," as described in the guidance document issued January 25, 1995, entitled "Options for Limiting Potential to Emit (PTE) of a Stationary Source under section 112 and Title V of the Clean Air Act (Act)." The description is as follows:

> Limitations established by rules. For less complex plant sites, and for source categories involving relatively few operations that are similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally enforceable restrictions. One approach that has been used is to establish a general rule which creates federally enforceable restrictions at one time for many sources (these rules have been referred to as "prohibitory" or "exclusionary" rules). The concept of exclusionary rules is described in detail in the November 3, 1993 memorandum ["Approaches to Creating Federally Enforceable Emissions Limits," from John S. Seitz]. A specific suggested approach for VOC limits by rule was described in EPA's memorandum dated October 15, 1993 entitled "Guidance for State Rules for Optional Federally Enforceable Emissions Limits Base Upon Volatile Organic Compound (VOC) Use." An example of such an exclusionary rule is a model rule developed for use in California. (The California model rule is attached, along with a discussion of its applicability to other situations - see Attachment 2). Exclusionary rules are included in a State's SIP or 112 program and generally become effective upon approval by the EPA.

The EPA prefers the term "exclusionary rule" in that this phrase is a less ambiguous description of the overall purpose of these rules.

General permits -A concept similar to the exclusionary rule is the establishment Of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit could provide for emission limitations in a one-time permitting process, and thus avoid the need to issue separate permits for each source. Although this concept is generally thought of as an element of Title V permit programs there in no reason that a state or local agency could not submit a general permit program as a SIP submittal Aimed at creating synthetic minor sources. Additionally FESOP [Federally Enforceable State Operating Permit usually reffering to Title I State OperatingPermit Programs approved under- the criteria established by EPA in the June 28, 1989 Federal Register notice, 54 FR 27274] programs can include general permits as an element of the FESOP program being approved into the SIP. The advantage of a SIP general permit, when compared to an exclusionary rule, is that upon approval by the EPA of the state's general permit program, a general permit could be written for an additional source type without triggering the need for the formal SIP revision process. (January 25, 1995 Seitz and Van Heuvelen memorandum, page 4.)

SIP or §112 Rules

Source-category standards 'approved in the. SIP. or under 112,if enforceable as a. practical matter, can be used as federally enforceable limits on potential to emit. Such provisions require public participation and EPA review. Once a specific source qualifies under the applicability requirements of the source category rule, additional public participation is not required to make the limits federally enforceable as a matter of legal sufficiency since the rule itself underwent public participation and EPA review. The rule must still be enforceable as practical matter in order to be considered federally enforceable. A source that violates this type of rule limiting potential to emit below major a source thresholds or is later determined not to qualify for coverage under the rule, could be subject to enforcement action for violation of the rule and for constructing or operating without a proper permit (a. part 70, a New Source Review permit, or operating without meeting §112 requirements, or any combination thereof).

General Permits

The title V regulations set out provisions for general permits covering numerous similar sources. The primary purpose of general permits is to provide a permitting alternative where

the normal permitting process would be overly burdensome, such as for area sources under section 112. General permits may be issued to cover any category of numerous similar sources, including major sources, provided that such sources meet certain criteria laid out in 40 CFR part 70. Sources may be issued general permits strictly for the purpose of avoiding classification as major source. in other words, general permits may be used to limit the potential to emit for numerous similar sources. However, general permits must also most both legal and practical federal enforceable requirements.

With respect to legal sufficiency, the operating permit regulations provide that once the general permit has been issued, after opportunity for public participation and, EPA and affected State review, the permitting authority may grant or deny a sources request to be covered by a general permit without further public participation or EPA or affected State review. The action of granting or denying the source's request is not subject to judicial review. A general permit does not carry a permit shield. A source may be subject to enforcement action for operating without a part 70 permit if the source is later determined not to qualify for coverage under the general permit. Sources covered by general permits must comply with all part 70 requirements.

State SIP or 112(l) General Permits

Another mechanism available to limit potential to emit is a general permit program approved into the SIP or under section 112(1), the hazardous air pollutant program authority. This mechanism allows permitting authorities to issue and revise general permits consistent with SIP or 112(1) program requirements without going through the SIP or 112(1) approval process for each general permit or revision of a general permit. The program is also separate from title V, like Title I state operating permits, and issuance and revisions of the permits are to comply with title V procedures.

Once a program is approved, issuing and revising general permits should be significantly less burdensome and time-consuming for State legislative and rulemaking authorities. The EPA review should also be less burdensome and time-consuming. After a program is approved, permitting authorities have the flexibility to submit and issue general permits as needed rather than submitting them all at once as part of a SIP submittal. Given the reduced procedural burden, permitting authorities should be able to issue general permits to small groups or categories or sources rather than attempt to cover broad categories with a generic rule. We anticipate that specific permit requirements or general permits may be readily developed with the assistance of interested industry groups.

The state general permit approach may allow sources to meet the federal the federal enforceability requirements more easily than other approaches. However, to use this approach, states must have a federally enforceable program that provides the state the authority, to issue such permits; to accomplish this, EPA must approve the program into the SIP or pursuant to section. 112(1) of the Clean Air Act.

Enforceability Principles

In 1989, in response to challenges from the Chemical Manufacturers Association and other industry groups, EPA reiterated its position that controls and limitations used to limit a source's Potential to emit must be federally enforceable. See 54 FR 27274 (June 28, 1989). Federally enforceable limits can be established by Clean Air Act programs such as NSPS, NESHAPs, MACTs, and SIP requirements. However, source-specific limits are generally set forth in permits. Generally, to be considered federally enforceable, the permitting program must be approved by EPA into the SIP and include provisions for public participation. "In addition, permit terms and conditions must be practicably enforceable to be considered federally enforceable. EPA provided specific guidance on federally enforceable permit conditions in a June 13, 1989 policy memo "Limiting Potential to Emit in New Source Permitting" from John Seitz and in the June 28, 1989 Federal Register notice (54 FR 27274) Additional guidance Can also be found in United states v. Louisiana Pacific, 682 F. Supp 1122 (D. Colo. 1987) 682 F. Supp 1141 (D. Colo.1988), which led to these guidance statements and a number of other memoranda covering practicable enforceability as it relates to rolling averages, short-term averages, and emission caps. See "Use of Long Term Rolling Averages to Limit Potential to Emit," form John. B. Rasnic to David Kee, February 24, 1992; "Limiting Potential to Emit;" from Mamie Miller to George Czerniak, August, 1992; "Policy Determination an Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project", from John B. Rasnic to David Kee, March 13, 1992; and "3M Tape Manufacturing Division Plant, St. Paul, Minnesota" from. John B. Rasnic to David Kee, July 14, 1992.

In 1987, EPA laid out enforceability criteria that SIP rules must meet. see "Review of State Implementation Plans and Revisions for Enforceability and Legal Sufficiency," from Michael Alushin, Alan Eckert, and John Seitz, September 3, 1987 (1997 SIP memo). The criteria include clear statements as to applicability, specificity as to the standard that must be met, explicit statements of the compliance time frames (e.g. hourly, daily, monthly, or 12-month averages, etc.), that the time frame and method of compliance employed must be sufficient to protect the standard involved, record keeping requirements must be specified, and equivalency provisions must meet certain requirements.

Based an these precedents this guidance describes six enforceability criteria which a rule or a general permit must meet to make limits enforceable as a practical matter. In general, practical enforceability for a source-specific permit term means that the provision must specify (1) a technically accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, annually); and (3) the method to determine compliance including appropriate monitoring, record keeping and reporting. For rules and general permits that apply to categories of sources, practical enforceability additionally requires that the provision (4) identify the categories of sources that are covered by the rule; (5) where coverage is optional, provide for notice to the permitting authority of the source's election to be covered by the rule; and (6) recognize the enforcement consequences relevant to the rule.

This guidance will address requirements (4) "arid (5) first as they are concepts that are unique to rules and general' permits.

A. Specific Applicability

Rules and general permits designed to limit potential to emit must be specific as to the emission units or sources covered by the rule or permit. In other words, the rule or permit must clearly identify the category(ies) of the sources that qualify for the rule's coverage. The rule must apply to categories of sources that are defined specifically or narrowly enough so that specific limits and compliance monitoring can be identified and achieved by all sources in the categories defined.

A rule or general permit that covers, a homogeneous group of sources should allow standards to be set that limit potential to emit and provide the specific monitoring requirements. (Monitoring is more fully addressed in section D.) The State can allow for generic control efficiencies where technically sound and appropriate, depending on the extent of the application and ability to monitor compliance with resultant emission limits. Similarly, specific and narrow applicability may allow generic material usage or limits on hours of operation to be sufficient. For example, a rule or general permit that applies to fossil fuel fired boilers of a certain size may allow for limits on material usage, such as fuel-type and quantity. A rule or general permit that applies, only to standby diesel generators or emergency generators may allow restrictions on hours of operation to limit potential to emit. The necessary compliance terms (i.e., monitoring or record keeping) associated with any of these limits, such as with hours of operation, can readily be specified in the rule or the general permit itself.

General permits under Title V are assumed to include this

enforceability principle because the Part 70 regulations set out specific criteria that states should consider in developing their general permit provisions (See 57 FR 32278). These factors include requirements that

> "categories of sources covered by general permits should be generally homogenous in terms of operations, processes, and emissions. All sources in the category should have essentially similar operations or processes and emit pollutants with similar characteristics."

Another factor stated is "sources should be subject to the same or substantially similar requirements governing operation, emissions, monitoring, reporting, or record keeping." Examples of source categories appropriate for general permits include: degreasers, dry cleaners, small heating systems, sheet fed printers, and VOC storage tanks (see 57 FR 32278).

B. Reporting or Notice to Permitting Authority

The rule or general permit should provide specific reporting requirements as part of the compliance method. Although the compliance method for all sources must include record keeping requirements, the permitting authority may make a determination that reporting requirements for small sources would provide minimal additional compliance assurance. Where ongoing reporting requirements are determined not to be reasonable for a category of sources, the rule or general permit should still provide that the source notify the permitting authority of its coverage by the rule or the permit. In the limited situation where all the sources described in a source category are required to comply with the all of the provisions of a rule or general permit, notice is not needed. However, where there are no reporting requirement's and no opt-in provisions, the permitting authority must provide the public with the names and locations of sources subject to the rule or permit.

For Title V general permits, Part 70 requires sources to submit an application for a general permit which must be approved or disapproved by the permitting authority. For SIP or §112 rules and SIP or §112 general permits, in response to receiving the notice or application, the permitting authority may issue an individual permit, or alternatively, a letter or certification. The permitting authority may also determine initially whether it will issue a response for each individual application or notice, and may initially specify a reasonable time period after which a source that has submitted an application or notice will be deemed to be authorized, to operate under the general permit or SIP or §112 rule.

C. Specific Technically Accurate Limits

The rule or general permit issued pursuant to the SIP or §112 must specify technically accurate limits on the potential to emit. The rule or general permit must clearly specify the limits that apply, and include the specific associated compliance monitoring. (The compliance monitoring requirements are discussed further in the next section.) The standards or limits must be technically specific and accurate to limit potential to emit, identifying any allowed deviations.

The 1987 policy on SIP enforceability states that limitations "must be sufficiently specific so that a source is fairly on notice as to the standard it must meet." For example, "alternative equivalent technique" provisions should not be approved without clarification concerning the time period over which equivalency is measured as wall as whether the equivalency applies on a per source or per line basis or is facility-wide.

Further, for potential to emit limitations, the standards set must be technically sufficient to provide assurance to EPA and the public that they actually represent a limitation on the potential to emit for the category of sources identified. Any presumption for control efficiency must be technically accurate and the rule must provide the specific parameters as enforceable limits to assure that the control efficiency will be met. For example, rules setting presumptive efficiencies for incineration controls applied to a specific or broad category must state the operating temperature limits or range, the air flow, or any other parameters that may affect the efficiency on which the presumptive efficiency is based. Similarly, material usage limits such as fuel limits, as stated above, require specifying the type of fuel and may require specifying other operating parameters.

A rule that allows sources to submit the specific parameters and associated limits to be monitored may not be enforceable because the rule itself does not set specific technical limits. The submission of these voluntarily accepted limits on parameters or monitoring requirements would need to be federally enforceable. Absent a source-specific permit and appropriate review and public participation of the limits, such a rule is not consistent with the EPA's enforceability principles.

D. Specific compliance Monitoring

The rule must specify the methods to determine compliance. Specifically, the rule must state the monitoring requirements, record keeping requirements, reporting requirements, and test methods as appropriate for each potential to emit limitation; and clarity which methods are used for making a direct determination of compliance with the potential to emit limitations.

"Monitoring" refers to many different types of data collection, including continuous emission or opacity monitoring, and measurements of various of Parameters of process or control devices (e.g. temperature, pressure drop, fuel usage) and record keeping of parameters that been limited ,such as hours of operation, production levels, or raw material usage. Without a verifiable plantwide, verifiable emission limits must assigned to each unit or group of units subject to the subject to he rule or general permit. Where monitoring cannot be used to determine emissions directly, limits on appropriate operating parameters must be established for the units or source, and must the monitoring must be sufficient to yield data form the relevant time period that is representative of the source's compliance with the standard or limit. Continuous emissions monitoring, especially in the case of smaller sources, is not required.

E. Practicably Enforceable Averaging Times

The averaging time for all limits must be practicably enforceable. In other words, the averaging time period must readily allow for determination of compliance. EPA policy expresses a preference toward short term limits, generally daily but not to exceed one month. However, EPA policy allows for rolling limits not to exceed 12 months or 365 days where the permitting authority finds that the limit provides an assurance that compliance can be readily determined and verified. See June 13, 1989 "Guidance on Limiting Potential to Emit," February 24, 1992 memorandum "Use of Long Term Rolling Averages to Limit Potential to Emit" from John Rasnic to David Kee and March 13 1992 "Policy Determination on Limiting Potential to Emit for Koch Refining Company Clean Fuels Project" from John B. Rasnic to David Kee, stating that determinations to allow an annual rolling average versus a shorter term limit must be made on a case by case basis. Various, factors weigh in favor of allowing a long term rolling average, such as historically unpredictable emissions. Other factors may weigh in favor of shorter term limit, such as the inability to set interim limits during the first year. The permitting agency must make a determination as to what monitoring and averaging period is warranted for the particular source-category in light of how close the allowable emissions would be to the applicability threshold.

F. Clearly Recognized Enforcement

Violations of limits imposed by the rule or general permit that limit potential to emit constitute violations of major source requirements. In other words the source would be violating a "synthetic minor" requirement which may result in the source being treated as a major source under Titles I and V. The 1989 Federal Register Notice provides for separate enforcement

and permitting treatment depending on whether the source subsequently chooses to become a major or remain minor. Thus violations of the rule or general permit or violation of the specific conditions of the rule or general permit subjects the source to potential enforcement under the Clean Air Act and state law. The operating permit rule states that not withstanding the shield provisions of part 70, the source subject to a general permit may be subject to enforcement action for operating without a part 70 permit if the source is later determined not to qualify or the conditions and terms of the general permit. Moreover, violation of any of the conditions of the rule or general permit may result in a different determination of the source's potential to emit and thus may subject the source to major requirements and to enforcement action for failure to comply with major source requirements from the initial determination.

G. Rule Requirements for State General Permit Programs

As discussed above, general permit programs must be submitted to EPA for approval under SIP authority or under section 112(1), or both, depending on its particular pollutant application. SIP and §112(1) approval and rulemaking procedures must be met, including public notice and comment. The specific application of the enforceability principles for establishing State SIP or §112(1) general permit programs require that the rule establishing the program set out these principles as rule requirements. In other words, these principles must be specific rule requirements to be met by each general permit.

The rule establishing the program must require that (1)general permits apply to a specific and narrow category of sources; (2) sources electing coverage under general permits where coverage is not mandatory, provide notice or reporting to the permitting authority; (3) general permits provide specific and technically accurate(verifiable) limits that restrict the potential to emit; (4) general permits contain specific compliance requirements; (5) Limits in general permits are established based on practicably enforceable averaging times; and (6) violations of the permit are considered violations of the state and federal requirements and result in the source being subject to major source requirements.

In addition, since the rule establishing the program does not provide the specific standards to be met by the source, each general permit, but not each application under each general permit, must be issued pursuant to public and EPA notice and comment. The 1989 Federal Register notice covering enforceability of operating permits requires that SIP operating permit programs issue permits pursuant to public and EPA notice and comment. Title V requires that permits, including general permits, be issued subject to EPA objection.

Finally, sources remain liable or compliance with major source requirements if the specific application of a general permit to the source does not limit the source's potential to emit below major source or major modification thresholds. (The limits provided in these mechanisms may actually limit the potential to emit of sources but may not limit the potential to emit for some sources to below the threshold necessary to avoid major source requirements. For example, a general permit for industrial boilers may in fact provide limits that are sufficient to bring a source with only two or three boilers to below the subject thresholds but a source with more than three boilers may have a limited PTE but not limited below the major source threshold.) Also, where the source is required to use another mechanism to limit potential to emit, i.e., a construction permit, the general permit may not be relied upon by the source or the State, to limit potential to emit.

Permits issued pursuant to the approved program, meeting the above requirements, are adequate to provide federally enforceable limits on potential to emit for New Source Review, title V, and §112 programs as long as they are approved pursuant to SIP (section 110) and section 112(1) authorities.

1/25/95

MEMORANDUM

SUBJECT: Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

Robert I. Van Heuvelen, Director
Office of Regulatory Enforcement (2241)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

Many stationary source requirements of the Act apply only to "major" sources. Major sources are those sources whose emissions of air pollutants exceed threshold emissions levels specified in the Act. For instance, section 112 requirements such as MACT and section 112(g) and title V operating permit requirements largely apply only to sources with emissions that exceed specified levels and are thus major. To determine whether a source is major, the Act focuses not only on a source's actual emissions, but also on its potential emissions. Thus, a source that has maintained actual emissions at levels below the major source threshold could still be subject to major source requirements if it has the potential to emit major amounts of air pollutants. However, in situations where unrestricted operation of a source would result in a potential to emit above major-source levels, such sources may legally avoid program requirements by taking federally-

enforceable permit conditions which limit emissions to levels below the applicable major source threshold. Federally-enforceable permit conditions, if violated, are subject to enforcement by the Environmental Protection Agency (EPA) or by citizens in addition to the State or Local agency.

As the deadlines for complying with MACT standards and title V operating permits approach, industry and State and local air pollution agencies have become increasingly focused on the need to adopt and implement federally-enforceable mechanisms to limit emissions from sources that desire to limit potential emissions to below major source levels. In fact, there are numerous options available which can be tailored by the States to provide such sources with simple and effective ways to qualify as minor sources. Because there appears to be some confusion and questions regarding how potential to emit limits may be established, EPA has decided to: (1) outline the available approaches to establishing potential to emit limitations, (2) describe developments related to the implementation of these various approaches, and (3) implement a transition policy that will allow certain sources to be treated as minor for a period of time sufficient for these sources to obtain a federally-enforceable limit.

Federal enforceability is an essential element of establishing limitations on a source's potential to emit. Federal enforceability ensures the conditions placed on emissions to limit a source's potential to emit are enforceable by EPA and citizens as a legal and practical matter, thereby providing the public with credible assurances that otherwise major sources are not avoiding applicable requirements of the Act. In order to ensure compliance with the Act, any approaches developed to allow sources to avoid the major source requirements must be supported by the Federal authorities granted to citizens and EPA. In addition, Federal enforceability provides source owners and operators with assurances that limitations they have obtained from a State or local agency will be recognized by EPA.

The concept of federal enforceability incorporates two separate fundamental elements that must be present in all limitations on a source's potential to emit. First, EPA must have a direct right to enforce restrictions and limitations imposed on a source to limit its exposure to Act programs. This requirement is based both on EPA's general interest in having the power to enforce "all relevant features of SIP's that are necessary for attainment and maintenance of NAAQS and PSD increments" (see 54 FR 27275, citing 48 FR 38748, August 25, 1983) as well as the specific goal of using national enforcement to ensure that the requirements of the Act are uniformly

implemented throughout the nation (see 54 FR 27277). Second, limitations must be enforceable as a practical matter.

It is important to recognize that there are shared responsibilities on the part of EPA, State, and local agencies, and on source owners to create and implement approaches to creating acceptable limitations on potential emissions. The lead responsibility for developing limitations on potential emissions rests primarily with source owners and State and local agencies. At the same time, EPA must work together with interested parties, including industry and States to ensure that clear guidance is established and that timely Federal input, including Federal approval actions, is provided where appropriate. The guidance in this memorandum is aimed towards continuing and improving this partnership.

Available Approaches for Creating Federally-enforceable Limitations on the Potential to Emit

There is no single "one size fits all" mechanism that would be appropriate for creating federally-enforceable limitations on potential emissions for all sources in all situations. The spectrum of available mechanisms should, however, ensure that State and local agencies can create federally-enforceable limitations without undue administrative burden to sources or the agency. With this in mind, EPA views the following types of programs, if submitted to and approved by EPA, as available to agencies seeking to establish federally-enforceable potential to emit limits:[1]

1. Federally-enforceable State operating permit programs (FESOPs) (non-title V). For complex sources with numerous and varying emission points, case-by-case permitting is generally needed for the establishment of limitations on the source's potential to emit. Such case-by-case permitting is often accomplished through a non-title V federally-enforceable State operating permit program. This type of permit program, and its basic elements, are described in guidance published in the Federal Register on June 28, 1989 (54 FR 27274). In short, the program must: (a) be approved into the SIP, (b) impose legal obligations to conform to the permit limitations, (c) provide for limits that are enforceable as a practical matter, (d) be issued in a process that provides for review and an opportunity for

[1]This is not an exhaustive list of considerations affecting potential to emit. Other federally-enforceable limits can be used, for example, source-specific SIP revisions. For brevity, we have included those which have the widest applicability.

comment by the public and by EPA, and (e) ensure that there is no relaxation of otherwise applicable Federal requirements. The EPA believes that these type of programs can be used for both criteria pollutants and hazardous air pollutants, as described in the memorandum, "Approaches to Creating Federally-Enforceable Emissions Limits," November 3, 1993. This memorandum (referred to below as the November 1993 memorandum) is included for your information as Attachment 1. There are a number of important clarifications with respect to hazardous air pollutants subsequent to the November 1993 memorandum which are discussed below (see section entitled "Limitations on Hazardous Air Pollutants").

2. Limitations established by rules. For less complex plant sites, and for source categories involving relatively few operations that are relatively similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally-enforceable restrictions. One approach that has been used is to establish a general rule which creates federally-enforceable restrictions at one time for many sources (these rules have been referred to as "exclusionary" rules and by some permitting agencies as "prohibitory" rules). A specific suggested approach for volatile organic compounds (VOC) limits by rule was described in EPA's memorandum dated October 15, 1993 entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based Upon Volatile Organic Compound (VOC) Use." An example of such an exclusionary rule is a model rule developed for use in California. (The California model rule is attached, along with a discussion of its applicability to other situations--see Attachment 2). Exclusionary rules are included in a State's SIP and generally become effective upon approval by EPA.

3. General permits. A concept similar to the exclusionary rule is the establishment of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit provides for conditions limiting potential to emit in a one-time permitting process, and thus avoids the need to issue separate permits for each source within the covered source type or category. Although this concept is generally thought of as an element of a title V permit program, there is no reason that a State or local agency could not submit a general permit program as a SIP submittal aimed at creating potential to emit limits for groups of sources. Additionally, general permits can be issued under the auspices of a SIP-approved FESOP. The advantage of a general permit, when compared to an exclusionary rule, is that upon approval by EPA of the State's permit program, a

general permit could be written for one or more additional source types without triggering the need for the formal SIP revision process.

4. Construction permits. Another type of case-by-case permit is a construction permit. These permits generally cover new and modified sources, and States have developed such permit programs as an element of their SIP's. As described in the November 1993 memorandum, these State major and minor new source review (NSR) construction permits can provide for federally-enforceable limitations on a source's potential to emit. Further discussion of the use of minor source NSR programs is contained in EPA's letter to Jason Grumet, NESCAUM, dated November 2, 1994, which is contained in Attachment 3. As noted in this letter, the usefulness of minor NSR programs for the creation of potential to emit limitations can vary from State to State, and is somewhat dependent on the scope of a State's program.

5. Title V permits. Operating permits issued under the Federal title V operating permits program can, in some cases, provide a convenient and readily available mechanism to create federally-enforceable limits. Although the applicability date for part 70 permit programs is generally the driving force for most of the current concerns with respect to potential to emit, there are other programs, such as the section 112 air toxics program, for which title V permits may themselves be a useful mechanism for creating potential to emit limits. For example, many sources will be considered to be major by virtue of combustion emissions of nitrogen oxides or sulfur dioxide, and will be required to obtain part 70 permits. Such permits could be used to establish federally-enforceable limitations that could ensure that the source is not considered a major source of hazardous air pollutants.

Practicable Enforceability

If limitations--whether imposed by SIP rules or through individual or general permits--are incomplete or vague or unsupported by appropriate compliance records, enforcement by the States, citizens and EPA would not be effective. Consequently, in all cases, limitations and restrictions must be of sufficient quality and quantity to ensure accountability (see 54 FR 27283).

The EPA has issued several guidance documents explaining the requirements of practicable enforceability (e.g., "Guidance on Limiting Potential to Emit in New Source Permitting," June 13, 1989; memorandum from John Rasnic entitled "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project," March 13, 1992). In general, practicable

enforceability for a source-specific permit means that the permit's provisions must specify: (1) A technically-accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); and (3) the method to determine compliance including appropriate monitoring, recordkeeping, and reporting. For rules and general permits that apply to categories of sources, practicable enforceability additionally requires that the provisions: (1) identify the types or categories of sources that are covered by the rule; (2) where coverage is optional, provide for notice to the permitting authority of the source's election to be covered by the rule; and (3) specify the enforcement consequences relevant to the rule. More specific guidance on these enforceability principles as they apply to rules and general permits is provided in Attachment 4.

Limitations on Hazardous Air Pollutants (HAP)

There are a number of important points to recognize with respect to the ability of existing State and local programs to create limitations for the 189 HAP listed in (or pursuant to) section 112(b) of the Act, consistent with the definitions of "potential to emit" and "federally-enforceable" in 40 CFR 63.2 (promulgated March 16, 1994, 59 FR 12408 in the part 63 General Provisions). The EPA believes that most State and local programs should have broad capabilities to handle the great majority of situations for which a potential to emit limitation on HAP is needed.

First, it is useful to note that the definition of potential to emit for the Federal air toxics program (see the subpart A "general provisions," section 63.2) considers, for purposes of controlling HAP emissions, federally-enforceable limitations on criteria pollutant emissions if "the effect such limitations would have on "[hazardous air pollutant] . . . emissions" is federally-enforceable (emphasis added). There are many examples of such criteria pollutant emission limits that are present in federally-enforceable State and local permits and rules. Examples would include a limitation constraining an operation to one (time limit specified) shift per day or limitations that effectively limit operations to 2000 hours per year. Other examples would include limitations on the amount of material used, for example a permit limitation constraining an operation to using no more than 100 gallons of paint per month. Additionally, federally-enforceable permit terms that, for example, required an incinerator to be operated and maintained at no less than 1600 degrees would have an obvious "effect" on the HAP present in the inlet stream.

Another federally-enforceable way criteria pollutant limitations affect HAP can be described as a "nested" HAP limit within a permit containing conditions limiting criteria pollutants. For example, the particular VOC's within a given operation may include toluene and xylene, which are also HAP. If the VOC-limiting permit has established limitations on the amount of toluene and xylene used as the means to reduce VOC, those limitations would have an obvious "effect" on HAP as well.

In cases as described above, the "effect" of criteria pollutant limits will be straightforward. In other cases, information may be needed on the nature of the HAP stream present. For example, a limit on VOC that ensured total VOC's of 20 tons per year may not ensure that each HAP present is less than 10 tons per year without further investigation. While the EPA intends to develop further technical guidance on situations for which additional permit terms and conditions may be needed to ensure that the "effect" is enforceable as a practical matter, the EPA intends to rely on State and local agencies to employ care in drafting enforceable requirements which recognize obvious environmental and health concerns.

There are, of course, a few important pollutants which are HAP but are not criteria pollutants. Example of these would include methylene chloride and other pollutants which are considered nonreactive and therefore exempt from coverage as VOC's. Especially in cases where such pollutants are the only pollutants present, criteria pollutant emission limitations may not be sufficient to limit HAP. For such cases, the State or local agency will need to seek program approval under section 112(l) of the Act.

Section 112(l) provides a clear mechanism for approval of State and local air toxics programs for purposes of establishing HAP-specific PTE limits. The EPA intends, where appropriate, that in approving permitting programs into the SIP, to add appropriate language citing approval pursuant to section 112(l) as well. An example illustrating section 112(l) approval is the approval of the State of Ohio's program for limiting potential to emit (see 59 FR 53587, October 25, 1994). In this notice, EPA granted approval under section 112(l) for hazardous air pollutants aspects of a State program for limiting potential to emit. Such language can be added to any federally-enforceable State operating permit program, exclusionary rule, or NSR program update SIP approval notice so long as the State or local program has the authority to regulate HAP and meets other section 112(l) approval criteria. Transition issues related to such section 112(l) approvals are discussed below.

Determination of Maximum Capacity

While EPA and States have been calculating potential to emit for a number of years, EPA believes that it is important at this time to provide some clarification on what is meant in the definition of potential to emit by the "maximum capacity of a stationary source to emit under its physical and operational design." Clearly, there are sources for which inherent physical limitations for the operation restrict the potential emissions of individual emission units. Where such inherent limitations can be documented by a source and confirmed by the permitting agency, EPA believes that States have the authority to make such judgements and factor them into estimates of a stationary source's potential to emit.

The EPA believes that the most straightforward examples of such inherent limitations is for single-emission unit type operations. For example, EPA does not believe that the "maximum capacity" language requires that owner of a paint spray booth at a small auto body shop must assume that (even if the source could be in operation year-round) spray equipment is operated 8760 hours per year in cases where there are inherent physical limitations on the number of cars that can be painted within any given period of time. For larger sources involving multiple emissions units and complex operations, EPA believes it can be more problematic to identify the inherent limitations that may exist.

The EPA intends, within its resource constraints, to issue technical assistance in this area by providing information on the type of operational limits that may be considered acceptable to limit the potential to emit for certain individual small source categories.

Transition Guidance for Section 112 and Title V Applicability

Most, if not all, States have recognized the need to develop options for limiting the potential emissions of sources and are moving forward with one or more of the strategies described in the preceding sections in conjunction with the submission and implementation of their part 70 permit programs. However, EPA is aware of the concern of States and sources that title V or section 112 implementation will move ahead of the development and implementation of these options, leaving sources with actual emissions clearly below the major source thresholds potentially subject to part 70 and other major source requirements. Gaps could theoretically occur during the time period it takes for a State program to be designed and administratively adopted by the State, approved into the SIP by EPA, and implemented as needed to

cover individual sources.

The EPA is committed to aiding all States in developing and implementing adequate, streamlined, and cost-effective vehicles for creating federally-enforceable limits on a source's potential emissions by the time that section 112 or title V requirements become effective. To help bridge any gaps, EPA will expedite its reviews of State exclusionary rules and operating permit rules by, among other things, coordinating the approval of these rules with the approval of the State's part 70 program and by using expeditious approval approaches such as "direct final" Federal Register notices to ensure that approval of these programs does not lag behind approval of the part 70 program.

In addition, in such approval notices EPA will affirm any limits established under the State's program since its adoption by the State but prior to Federal approval if such limits were established in accordance with the procedures and requirements of the approved program. An example of language affirming such limits was recently used in approving an Illinois SIP revision (see 57 FR 59931, included as Attachment 5).

The EPA remains concerned that even with expedited approvals and other strategies, sources may face gaps in the ability to acquire federally-enforceable potential to emit limits due to delays in State adoption or EPA approval of programs or in their implementation. In order to ensure that such gaps do not create adverse consequences for States or for sources, EPA is announcing a transition policy for a period up to two years from the date of this memorandum. The EPA intends to make this transition policy available at the discretion of the State or local agency to the extent there are sources which the State believes can benefit from such a transition policy. The transition period will extend from now until the gaps in program implementation are filled, but no later than January 1997. Today's guidance, which EPA intends to codify through a notice and comment rulemaking, provides States discretion to use the following options for satisfying potential to emit requirements during this transition period.

1. Sources maintaining emissions below 50 percent of all applicable major source requirements. For sources that typically and consistently maintain emissions significantly below major source levels, relatively few benefits would be gained by making such sources subject to major source requirements under the Act. For this reason, many States are developing exclusionary rules and general permits to create simple, streamlined means to ensure that these sources are not considered major sources. To ease the burden on States' implementation of title V, and to ensure that delays in EPA's approval of these types of programs will not

cause an administrative burden on the States, EPA is providing a 2-year transition period for sources that maintain their actual emissions, for every consecutive 12-month period (beginning with the 12 months immediately preceding the date of this memorandum), at levels that do not exceed 50 percent of any and all of the major stationary source thresholds applicable to that source. A source that exceeds the 50 percent threshold, without complying with major source requirements of the Act (or without otherwise limiting its potential to emit), could be subject to enforcement. For this 2-year period, such sources would not be treated as major sources and would not be required to obtain a permit that limits their potential to emit. To qualify under this transition policy, sources must maintain adequate records on site to demonstrate that emissions are maintained below these thresholds for the entire as major sources and would not be required to obtain a permit that limits their potential to emit that would be considered to be adequate during this transition period. Consistent with the California approach, EPA believes it is appropriate for the amount of recordkeeping to vary according to the level of emissions (see paragraphs 1.2 and 4.2 of the attached rule).

2. Larger sources with State limits. For the 2-year transition period, restrictions contained in State permits issued to sources above the 50 percent threshold would be treated by EPA as acceptable limits on potential to emit, provided: (a) the permit is enforceable as a practical matter; (b) the source owner submits a written certification to EPA that it will comply with the limits as a restriction on its potential to emit; and (c) the source owner, in the certification, accepts Federal and citizen enforcement of the limits (this is appropriate given that the limits are being taken to avoid otherwise applicable Federal requirements). Such limits will be valid for purposes of limiting potential to emit from the date the certification is received by EPA until the end of the transition period. States interested in making use of this portion of the transition policy should work with their Regional Office to develop an appropriate certification process.

3. Limits for noncriteria HAP. For noncriteria HAP for which no existing federally-approved program is available for the creation of federally-enforceable limits, the 2-year transition period provides for sufficient time to gain approval pursuant to section 112(l). For the 2-year transition period, State restrictions on such noncriteria pollutants issued to sources with emissions above the 50 percent threshold would be treated by EPA as limiting a source's potential to emit, provided that:
(a) the restrictions are enforceable as a practical matter;
(b) the source owner submits a written certification to EPA that

it will comply with the limits as a restriction on its potential to emit; and (c) the source owner, in the certification, accepts Federal and citizen enforcement of the limits. Such limits will be valid for purposes of limiting potential to emit from the date the certification is received by EPA until the end of the transition period.

The Regional Offices should send this memorandum, including the attachments, to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Timothy Smith of the Integrated Implementation Group at 919-541-4718, or Clara Poffenberger with the Air Enforcement Division at 202-564-8709.

Attachments

cc: Air Branch Chief, Region I-X
Regional Counsels

Attachment 1
November 3, 1993 memorandum

November 3, 1993

MEMORANDUM

SUBJECT: Approaches to Creating Federally-Enforceable Emissions Limits

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

The new operating permits program under title V of the Clean Air Act (Act), combined with the additional and lower thresholds for "major" sources also provided by the 1990 Amendments to the Act, has led to greatly increased interest by State and local air pollution control agencies, as well as sources, in obtaining federally-enforceable limits on source potential to emit air pollutants. Such limits entitle sources to be considered "minor" for the purposes of title V permitting and various other requirements of the Act. Numerous parties have identified this as a high priority concern potentially involving thousands of sources in each of the larger States.

The issue of creating federally-enforceable emissions limits has broad implications throughout air programs. Although many of the issues mentioned above have arisen in the context of the title V permits program, the same issues exist for other programs, including those under section 112 of the Act. As discussed below, traditional approaches to creating federally-enforceable emissions limits may be unnecessarily burdensome and time-consuming for certain types and sizes of sources. In

addition, they have been of limited usefulness with respect to creating such limits for emissions of hazardous air pollutants (HAP's).

The purpose of this memorandum is to respond to these needs by announcing the availability of two further approaches to creating federally-enforceable emissions limits: the extension of existing criteria pollutant program mechanisms for HAP program purposes, and the creation of certain classes of standardized emissions limits by rule. We believe that these options are responsive to emerging air program implementation issues and provide a reasonable balance between the need for administrative streamlining and the need for emissions limits that are technically sound and enforceable.

Background

Various regulatory options already exist for the creation of federally-enforceable limits on potential to emit. These were summarized in a September 18, 1992 memorandum from John Calcagni, Director, Air Quality Management Division. That memorandum identified the five regulatory mechanisms generally seen as available. These are: State major and minor new source review (NSR) permits [if the NSR program has been approved into the State implementation plan (SIP) and meets certain procedural requirements]; operating permits based on programs approved into the SIP pursuant to the criteria in the June 28, 1989 Federal Register (54 FR 27274); and title V permits (including general permits). Also available are SIP limits for individual sources and limits for HAP's created through a State program approved pursuant to section 112(l) of the Act.

Regional Office and State air program officials realize that these five options are generally workable, but feel that the programs emerging from the 1990 Amendments present certain further needs that are not well met. They note that NSR is not always available, title V permitting can be more rigorous than appropriate for those sources that are in fact quite small, and that general permits have limitations in their usefulness. The use of State operating permits approved into the SIP pursuant to the June 28, 1989 Federal Register is generally considered to be a promising option for some of these transactions; however, these programs do not regulate toxics directly.

State Operating Permits for Both Criteria Pollutants and HAP's

As indicated above, State operating permits issued by programs approved into the SIP pursuant to the process provided in the June 28, 1989 Federal Register are recognized as federally

enforceable. This is a useful option, but has historically been viewed as limited in its ability to directly create emissions limits for HAP's because of the SIP focus on criteria pollutants.

Since that option was created, however, section 112 of the Act has been rewritten, creating significant new regulatory requirements and conferring additional responsibilities and authorities upon the Environmental Protection Agency (EPA) and the States. Section 112 now mandates a wide range of activities: source-specific preconstruction reviews, areawide approaches to controlling risk, provisions for permitting pursuant to the title V permitting program, and State program provisions in section 112(l) that are similar to aspects of the SIP program. A result of these changes is that implementation of toxics programs will entail the use of many of the same administrative mechanisms as have been in use for the criteria pollutant programs.

Upon further analysis of these new program mandates and corresponding authorities, EPA concludes that section 112 of the Act, including section 112(l), authorizes it to recognize these same State operating permits programs for the creation of federally-enforceable emissions limits in support of the implementation of section 112. Congress recognized, and longstanding State practice confirms, that operating permits are core-implementing mechanisms for air quality program requirements. This was EPA's basis for concluding that section 110 of the Act authorizes the recognition and approval into the SIP of operating permits pursuant to the June 28, 1989 promulgation, even though section 110 did not expressly provide for such a program. Similarly, broad provision of section 112(l) for "a program for the implementation and enforcement . . . of emission standards and other requirements for air pollutants subject to this section" provides a sound basis for EPA recognition of State operating permits for implementation and enforcement of section 112 requirements in the same manner as these permitting processes were recognized pursuant to section 110.

In implementing this authority to approve State operating permits programs pursuant to section 112, it should be noted that the specific criteria for what constitutes a federally-enforceable permit are also the same as for the existing SIP programs. The June 28, 1989 Federal Register essentially addressed in a generic sense the core criteria for creating federally-enforceable emissions limits in operating permits: appropriate procedural mechanisms, including public notice and opportunity for comment, statutory authority for EPA approval of the State program, and enforceability as a practical matter. The EPA did this in the context of SIP development, not because these criteria are specific to the SIP, but because section 110 of the

Act was seen as our only certain statutory basis for this prior to the 1990 Amendments. Based on the discussion above, States can extend or develop State operating permits programs for toxics pursuant to the criteria set forth in the June 28, 1989 Federal Register. The EPA is also evaluating analogous opportunities to enhance State NSR programs to address toxics and will address this in future guidance.

This is a significant opportunity to limit directly the emissions of HAP's. It also offers the advantage of the administrative efficiencies that arise from using existing administrative mechanisms, as opposed to creating additional ones.

States are encouraged to consult with EPA Regional Offices to discuss the details of adapting their current programs to carry out these additional functions. The EPA will consider State permitting programs meeting the criteria in the June 28, 1989 Federal Register as being approvable for HAP program functions as well. States may submit their programs for implementing this process with their part 70 program submittals, or at such other time as they choose. The EPA has various options for administratively recognizing these State program submittals. The EPA plans initially to review these State programs as SIP review actions, but with official recognition pursuant to authorities in both sections 110 and 112. Once rulemaking pursuant to section 112(l) of the Act is completed, EPA expects to use the process developed in that rule for approving State programs for HAP's. The section 112(l) process may be especially useful prior to EPA approval and implementation of the State title V programs. The reader may wish to refer to the process for certain section 112(l) approvals proposed on May 19, 1993 (58 FR 29296) (see section 63.91).

The General Provisions (40 CFR part 63) establish the applicability framework for the implementation of section 112. In the final rule, EPA will indicate that State operating permits programs which meet the procedural requirements of the June 28, 1989 Federal Register can be used to develop federally-enforceable emissions limits for HAP's, thereby limiting a source's potential to emit. In addition, after we gain implementation experience, EPA will be evaluating the usefulness of further rulemaking to define more specific criteria by which this process may be used in the implementation of programs under section 112 of the Act. Any such rulemaking could similarly be incorporated into the General Provisions in part 63.

State-Standardized Processes Created by Rule to Establish Source-Specific, Federally-Enforceable Emissions Limits

State air program officials have highlighted specific types of sources that are of particular administrative concern because of their nature and number. These include sources whose emissions are primarily volatile organic compounds (VOC) arising from use of solvents or coatings, such as automobile body shops. Another example is fuel-burning sources that have low actual emissions because of limited hours of operation, but with the potential to emit sulfur dioxide in amounts sufficient to cause them to be classified as major sources.

The EPA recognizes that emissions limitations for some processes can be created through standardized protocols. For example, limitations on potential to emit could be established for certain VOC sources on the basis of limits on solvent use, backed up by recordkeeping and by periodic reporting. Similarly, limitations on sulfur dioxide emissions could be based on specified sulfur content of fuel and the source's obligation to limit usage to certain maximum amounts. Limits on hours of operation may be acceptable for certain others sources, such as standby boilers. In all cases, of course, the technical requirements would need to be supported by sufficient compliance procedures, especially monitoring and reporting, to be considered enforceable.

The EPA concludes that such protocols could be relied on to create federally-enforceable limitations on potential to emit if adopted through rulemaking and approved by EPA. Although such an approach is appropriate for only a limited number of source categories, these categories include large numbers of sources, such as dry cleaners, auto body shops, gas stations, printers, and surface coaters. If such standardized control protocols are sufficiently reliable and replicable, EPA and the public need not be involved in their application to individual sources, as long as the protocols themselves have been subject to notice and opportunity to comment and have been approved by EPA into the SIP.

To further illustrate this concept and to provide implementation support to the States, EPA has recently released guidance on one important way of using this process. This document, entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based on Volatile Organic Compound Use," was issued by D. Kent Berry, Acting Director, Air Quality Management Division, on October 15, 1993. It describes approvable processes by which States can create federally-enforceable emissions limits for VOC for large numbers of sources in a variety of source categories.

States have flexibility in their choice of administrative process for implementation. In some cases, it may be adequate

for a State to apply these limits to individual sources through a registration process rather than a permit. A source could simply submit a certification to the State committing to comply with the terms of an approved protocol. Violations of these certifications would constitute SIP violations, in the case of protocols approved into the SIP, and be subject to the same enforcement mechanisms as apply in the case of any other SIP violation. Such violations would, of course, also subject the source to enforcement for failure to comply with the requirements that apply to major sources, such as the requirement to obtain a title V permit or comply with various requirements of section 112 of the Act.

Some States have also indicated an interest in more expansive approaches to implementing this concept, such as making presumptive determinations of control equipment efficiency with respect to particular types of sources and pollutants. While such approaches are more complicated and present greater numbers of concerns in the EPA review process, they offer real potential if properly crafted. The EPA will evaluate State proposals and approve them if they are technically sound and enforceable as a practical matter.

States may elect to use this approach to create federally-enforceable emissions limits for sources of HAP's as well. Based on the same authorities in section 112 of the Act, as cited above in the case of operating permits, EPA can officially recognize such State program submittals. As with the operating permits option discussed in the preceding section, EPA plans initially to review these activities as SIP revisions, but with approval pursuant to both sections 110 and 112 of the Act, and approve them through the section 112(l) process when that rule is final.

Implementation Guidance

As indicated above, the creation of federally-enforceable limits on a source's potential to emit involves the identification of the procedural mechanisms for these efforts, including the statutory basis for their approval by EPA, and the technical criteria necessary for their implementation. Today's guidance primarily addresses the procedural mechanisms available and the statutory basis for EPA approval.

The EPA will be providing further information with respect to the implementation of these concepts. As described above, the first portion of this guidance, addressing limits on VOC emissions, was issued on October 15, 1993. My office is currently working with Regional Offices and certain States in order to assist in the development of program options under consideration by those States. We will provide technical and

regulatory support to other State programs and will make the results of these efforts publicly available through the Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network bulletin board.

We will provide further support through the release of a document entitled "Enforceability Requirements for Limiting Potential to Emit Through SIP Rules and General Permits," which is currently undergoing final review within EPA. In addition, EPA will be highlighting options for use of existing technical guidance with respect to creating sound and enforceable emissions limits. An important example of such guidance is the EPA "Blue Book," which has been in use by States for the past 5 years as part of their VOC control programs.

States are encouraged to discuss program needs with their EPA Regional Offices. The OAQPS will work with them in addressing approvals. As indicated, additional technical guidance for implementing these approaches is underway and will be made publicly available soon. For further information, please call Kirt Cox at (919) 541-5399.

cc: Air Branch Chief, Regions I-X
Regional Counsel, Regions I-X
OAQPS Division Directors
A. Eckert
M. Winer
A. Schwartz
E. Hoerath

Attachment 2
California Example Rule

Background

State agencies and local agencies (such as the Air Pollution Control Districts in California) can adopt rules which place emissions limitations on a category of sources through a combination of limitations and compliance requirements. These rules, if practicably enforceable, adopted with adequate public process and approved into the SIP, can validly limit potential to emit. Moreover, because State or local rules can cover many sources with a single regulatory action, they are well-suited to cover large populations of smaller sources. Many States are finding that a combination of SIP rules or general permits for smaller sources combined with individual permits for larger sources provides the simplest means of ensuring that minor source emissions are adequately limited.

Discussion of California Rule

The EPA, the California Air Pollution Control Officers Association and the California Air Resources Board recently completed development of a model rule for use by the California Air Pollution Control Districts. Because the rule contains several innovations, including covering all source categories, and should prove to be an inexpensive and efficient means of limiting the potential emissions of thousands of sources in California, the EPA believes that parts of the rule may be helpful for other States to review and consider.

The proposed rule is designed to place smaller sources under annual emissions limits which restrict their "potential to emit" and thus their exposure to "major source" requirements of the Clean Air Act. The rule ensures compliance with the annual limit through a series of recordkeeping and reporting requirements. These requirements are tapered to reduce burdens as source size decreases. The rule creates three levels of responsibility. The first tier requires both recordkeeping and reporting. The second tier requires only recordkeeping with no reporting. For instance, sources that emit only attainment pollutants which limit their emissions to below 25 tons per year have no reporting requirement. For sources under 5 tons per year (or 2 tons per year for a single hazardous air pollutant), there is no specified recordkeeping or reporting requirements although these sources must still maintain sufficient records to demonstrate their compliance with the rule.

To the extent possible, the recordkeeping requirements are itemized by source category and are designed to take advantage of

records that sources are already likely to maintain. Through these measures, the rule should assure the public that the sources subject to the rule are properly maintaining their emissions below major source levels, while maximizing source flexibility and minimizing paperwork.

There are other safeguards built into the rule and in California's overall regulatory scheme which add to the EPA's confidence that the proposal can work. The rule applies only to sources that agree to limit their emissions to 50 percent or less of the major source threshold. Sources with emissions above this level must either comply with all applicable "major source" requirements or secure a source-specific, federally-enforceable Air Pollution Control District permit that properly limits emissions to levels below major source thresholds. Some sources may be able to qualify for an "alternative operation limit" which places simple operating limits on a source's combustion of fuel, sale of gasoline or use of a solvent. Because of the ease with which compliance can be tracked with operational limits, the rule allows sources using these limits to go up to 80 percent of the major source threshold. Either way, EPA believes that the rule creates a sufficient compliance buffer.

Moreover, California has an extensive permit and inspection infrastructure that increases EPA's confidence that the rule will prove adequate for limiting emissions. California law requires that, upon annual renewal, each permit be reviewed to determine that the permit conditions are adequate to assure compliance with district rules and other applicable requirements. In addition, most California Air Pollution Control Districts have an extensive inspection program which means that compliance with the rule will be spot checked by inspectors visiting the source.

Finally, the rule is designed to provide smaller sources with a federally-enforceable means of limiting their potential emissions. The rule excludes sources that already have a federally enforceable operating permit, and it cannot be used to avoid complying with an permit required by the Air Pollution Control Districts.

Aside from these general observations, EPA did have a number of comments regarding specific language included in the rule. The three most significant comments are set forth below. However, States interested in using this rule as a model should be aware that it was specifically designed to fit with California State law and existing SIP provisions and that States may wish to consider making other changes to reflect their individual needs and requirements.

Section 2.7: In a PM-10 nonattainment area, PM-10 precursors may need to be included when determining whether a source is major as required by section 189(e) of the Clean Air Act. Districts adopting this model rule should consider whether the definition of "Major Source" in section 2.7 should be augmented to include sources of PM-10 precursors.

Section 4.2(D): The rule allows sources using air pollution control equipment to demonstrate compliance through the maintenance of general records on the unit and its operations. EPA has always been concerned with this provision since many pollution control units are only effective if specific operating procedures are followed. These specifics are best set and tracked in a source-specific, federally enforceable permit. For this reason, section 1.3 sunsets the applicability of the draft rule, after January 1, 1999, to pollution control equipment. For the coverage to continue beyond that date, a district must extend the provision. The EPA will disapprove the extension if the experience with the rule demonstrates that more specific conditions are needed to ensure that pollution control devices are being used properly and continuously.

Section 4.2(E): In general, EPA does not favor the use of generic or catch-all recordkeeping requirements for compliance purposes. There is a fear that the records necessary to show compliance for individual source categories will not be specified by the generic provision and thus will not be maintained. For this reason, EPA urges the Board and the Districts to evaluate regularly whether specific recordkeeping requirements should be developed for additional categories. As we noted during our negotiations, EPA will evaluate this question after the rule is in effect for three years and the EPA may seek -- through a SIP call or through other mechanisms -- to require additional recordkeeping requirements if there are implementation problems with this generic category. The districts may wish to add to the rule a provision which would authorize them to add recordkeeping requirements for additional source categories without a further SIP revision.

State of California
Proposed Rule to Limit
Potential to Emit
January 11, 1995

1.0 APPLICABILITY

1.1 General Applicability: This rule shall apply to any stationary source which would, if it did not comply with the limitations set forth in this rule, have the potential to emit air contaminants equal to or in excess of the threshold for a major source of regulated air pollutants or a major source of hazardous air pollutants (HAPs) and which meets one of the following conditions:

A. In every 12-month period, the actual emissions of the stationary source are less than or equal to the emission limitations specified in section 3.1 below; or

B. In every 12-month period, at least 90 percent of the emissions from the stationary source are associated with an operation limited by any one of the alternative operational limits specified in section 6.1 below.

1.2 Stationary Source with De Minimis Emissions: The recordkeeping and reporting provisions in sections 4.0, 5.0 and 6.0 below shall not apply to a stationary source with de minimis emissions or operations as specified in either subsection A or B below:

A. In every 12-month period, the stationary source emits less than or equal to the following quantities of emissions:

1. 5 tons per year of a regulated air pollutant (excluding HAPs),

2. 2 tons per year of a single HAP,

3. 5 tons per year of any combination of HAPs, and

4. 20 percent of any lesser threshold for a single HAP that the United States Environmental Protection Agency (U.S. EPA) may establish by rule.

B. In every 12-month period, at least 90 percent of the stationary source's emissions are associated with an operation for which the throughput is less than or

equal to one of the quantities specified in subsections 1 through 9 below:

1. 1,400 gallons of any combination of solvent-containing materials but no more than 550 gallons of any one solvent-containing material, provided that the materials do not contain the following: methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene;

2. 750 gallons of any combination of solvent-containing materials where the materials contain the following: methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, but not more than 300 gallons of any one solvent-containing material;

3. ____ gallons of solvent-containing (or volatile organic compound containing) material used at a paint spray unit(s);[2]

4. 4,400,000 gallons of gasoline dispensed from equipment with Phase I and II vapor recovery systems;

5. 470,000 gallons of gasoline dispensed from equipment without Phase I and II vapor recovery systems;

6. 1,400 gallons of gasoline combusted;

7. 16,600 gallons of diesel fuel combusted;

8. 500,000 gallons of distillate oil combusted, or

9. 71,400,000 cubic feet of natural gas combusted.

Within 30 days of a written request by the District or the U.S. EPA, the owner or operator of a stationary source not maintaining records pursuant to sections 4.0 or 6.0 shall demonstrate that the stationary source's emissions or throughput are not in excess of the applicable quantities set forth in subsection A or B above.

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[2]To be determined based on district SIP rules

1.3 Provision for Air Pollution Control Equipment: The owner or operator of a stationary source may take into account the operation of air pollution control equipment on the capacity of the source to emit an air contaminant if the equipment is required by Federal, State, or District rules and regulations or permit terms and conditions. The owner or operator of the stationary source shall maintain and operate such air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. This provision shall not apply after January 1, 1999 unless such operational limitation is federally enforceable or unless the District Board specifically extends this provision and it is submitted to the U.S. EPA. Such extension shall be valid unless, and until, the U.S. EPA disapproves the extension of this provision.

1.4 Exemption, Stationary Source Subject to Rule ____ (District Title V rule): This rule shall not apply to the following stationary sources:

A. Any stationary source whose actual emissions, throughput, or operation, at any time after the effective of this rule, is greater than the quantities specified in sections 3.1 or 6.1 below and which meets both of the following conditions:

1. The owner or operator has notified the District at least 30 days prior to any exceedance that s/he will submit an application for a Part 70 permit, or otherwise obtain federally-enforceable permit limits, and

2. A complete Part 70 permit application is received by the District, or the permit action to otherwise obtain federally-enforceable limits is completed, within 12 months of the date of notification.

However, the stationary source may be immediately subject to applicable federal requirements, including but not limited to, a maximum achievable control technology (MACT) standard.

B. Any stationary source that has applied for a Part 70 permit in a timely manner and in conformance with Rule ____ (the District's Title V rule), and is awaiting final action by the District and U.S. EPA.

C. Any stationary source required to obtain an operating permit under Rule ____ (the District's Title V rule) for any reason other than being a major source.

D. Any stationary source with a valid Part 70 permit.

Notwithstanding subsections B and D above, nothing in this section shall prevent any stationary source which has had a Part 70 permit from qualifying to comply with this rule in the future in lieu of maintaining an application for a Part 70 permit or upon rescission of a Part 70 permit if the owner or operator demonstrates that the stationary source is in compliance with the emissions limitations in section 3.1 below or an applicable alternative operational limit in section 6.1 below.

1.5 Exemption, Stationary Source with a Limitation on Potential to Emit: this rule shall not apply to any stationary source which has a valid operating permit with federally-enforceable conditions or other federally-enforceable limits limiting its potential to emit to below the applicable threshold(s) for a major source as defined in sections 2.7 and 2.8 below.

1.6 Within three years of the effective date of Rule ____ (District Title V rule), the District shall maintain and make available to the public upon request, for each stationary source subject to this rule, information identifying the provisions of this rule applicable to the source.

1.7 This rule shall not relieve any stationary source from complying with requirements pertaining to any otherwise applicable preconstruction permit, or to replace a condition or term of any preconstruction permit, or any provision of a preconstruction permitting program.[3] This does not preclude issuance of any preconstruction permit with conditions or terms necessary to ensure compliance with this rule.

[3]For example, PSD, NSR, and ATC

2.0 DEFINITIONS

All terms shall retain the definitions provided under 40 CFR Part 70.2 [alternatively, the District Title V rule] unless otherwise defined herein.

2.1 12-month period: A period of twelve consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month.

2.2 Actual Emissions: The emissions of a regulated air pollutant from a stationary source for every 12-month period. Valid continuous emission monitoring data or source test data shall be preferentially used to determine actual emissions. In the absence of valid continuous emissions monitoring data or source test data, the basis for determining actual emissions shall be: throughputs of process materials; throughputs of materials stored; usage of materials; data provided in manufacturer's product specifications, material volatile organic compound (VOC) content reports or laboratory analyses; other information required by this rule and applicable District, State and Federal regulations; or information requested in writing by the District. All calculations of actual emissions shall use U.S. EPA, California Air Resources Board (CARB) or District approved methods, including emission factors and assumptions.

2.3 Alternative Operational Limit: A limit on a measurable parameter, such as hours of operation, throughput of materials, use of materials, or quantity of product, as specified in Section 6.0, Alternative Operational Limit and Requirements.

2.4 Emission Unit: Any article, machine, equipment, operation, contrivance or related groupings of such that may produce and/or emit any regulated air pollutant or hazardous air pollutant.

2.5 Federal Clean Air Act: The federal Clean Air Act (CAA) as amended in 1990 (42 U.S.C. section 7401 et seq.) and its implementing regulations.

2.6 Hazardous Air Pollutant: Any air pollutant listed pursuant to section 112(b) of the federal Clean Air Act.

2.7 Major Source of Regulated Air Pollutants (excluding HAPs): A stationary source that emits or has the potential to emit a regulated air pollutant (excluding HAPs) in quantities equal

to or exceeding the lesser of any of the following thresholds:

A. 100 tons per year (tpy) of any regulated air pollutant;

B. 50 tpy of volatile organic compounds or oxides of nitrogen for a federal ozone nonattainment area classified as serious, 25 tpy for an area classified as severe, or 10 tpy for an area classified as extreme; and

C. 70 tpy of PM_{10} for a federal PM_{10} nonattainment area classified as serious.

Fugitive emissions of these pollutants shall be considered in calculating total emissions for stationary sources in accordance with 40 CFR Part 70.2 "Definitions- Major source(2)."

2.8 Major Source of Hazardous Air Pollutants: A stationary source that emits or has the potential to emit 10 tons per year or more of a single HAP listed in section 112(b) of the CAA, 25 tons per year or more of any combination of HAPs, or such lesser quantity as the U.S. EPA may establish by rule. Fugitive emissions of HAPs shall be considered in calculating emissions for all stationary sources. The definition of a major source of radionuclides shall be specified by rule by the U.S. EPA .

2.9 Part 70 Permit: An operating permit issued to a stationary source pursuant to an interim, partial or final Title V program approved by the U.S. EPA.

2.10 Potential to Emit: The maximum capacity of a stationary source to emit a regulated air pollutant based on its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation is federally enforceable.

2.11 Process Statement: An annual report on permitted emission units from an owner or operator of a stationary source certifying under penalty of perjury the following: throughputs of process materials; throughputs of materials stored; usage of materials; fuel usage; any available continuous emissions monitoring data; hours of operation;

and any other information required by this rule or requested in writing by the District.

2.12 Regulated Air Pollutant: The following air pollutants are regulated:

A. Oxides of nitrogen and volatile organic compounds;

B. Any pollutant for which a national ambient air quality standard has been promulgated;

C. Any Class I or Class II ozone depleting substance subject to a standard promulgated under Title VI of the federal Clean Air Act;

D. Any pollutant that is subject to any standard promulgated under section 111 of the federal Clean Air Act; and

E. Any pollutant subject to a standard or requirement promulgated pursuant to section 112 of the federal Clean Air Act, including:

1. Any pollutant listed pursuant to section 112(r) (Prevention of Accidental Releases) shall be considered a regulated air pollutant upon promulgation of the list.

2. Any HAP subject to a standard or other requirement promulgated by the U.S. EPA pursuant to section 112(d) or adopted by the District pursuant to 112(g) and (j) shall be considered a regulated air pollutant for all sources or categories of sources: 1) upon promulgation of the standard or requirement, or 2) 18 months after the standard or requirement was scheduled to be promulgated pursuant to section 112(e)(3).

3. Any HAP subject to a District case-by-case emissions limitation determination for a new or modified source, prior to the U.S. EPA promulgation or scheduled promulgation of an emissions limitation shall be considered a regulated air pollutant when the determination is made pursuant to section 112(g)(2). In case-by-case emissions limitation determinations, the HAP shall be considered a regulated air pollutant only for the individual source for which the emissions limitation determination was made.

3.0 EMISSION LIMITATIONS

3.1 Unless the owner or operator has chosen to operate the stationary source under an alternative operational limit specified in section 6.1 below, no stationary source subject to this rule shall emit in every 12-month period more than the following quantities of emissions:

A. 50 percent of the major source thresholds for regulated air pollutants (excluding HAPs),

B. 5 tons per year of a single HAP,

C. 12.5 tons per year of any combination of HAPs, and

D. 50 percent of any lesser threshold for a single HAP as the U.S. EPA may establish by rule.

3.2 The APCO shall evaluate a stationary source's compliance with the emission limitations in section 3.1 above as part of the District's annual permit renewal process required by Health & Safety Code section 42301(e). In performing the evaluation, the APCO shall consider any annual process statement submitted pursuant to Section 5.0, Reporting Requirements. In the absence of valid continuous emission monitoring data or source test data, actual emissions shall be calculated using emissions factors approved by the U.S. EPA , CARB, or the APCO.

3.3 Unless the owner or operator has chosen to operate the stationary source under an alternative operational limit specified in section 6.1 below, the owner or operator of a stationary source subject to this rule shall obtain any necessary permits prior to commencing any physical or operational change or activity which will result in actual emissions that exceed the limits specified in section 3.1 above.

4.0 RECORDKEEPING REQUIREMENTS

Immediately after adoption of this rule, the owner or operator of a stationary source subject to this rule shall comply with any applicable recordkeeping requirements in this section. However, for a stationary source operating under an alternative operational limit, the owner or operator shall instead comply with the applicable recordkeeping and reporting requirements specified in Section 6.0, Alternative Operational Limit and Requirements. The recordkeeping requirements of this rule shall not

replace any recordkeeping requirement contained in an operating permit or in a District, State, or Federal rule or regulation.

4.1. A stationary source previously covered by the provisions in section 1.2 above shall comply with the applicable provisions of section 4.0 above and sections 5.0 and 6.0 below if the stationary source exceeds the quantities specified in section 1.2.A above.

4.2 The owner or operator of a stationary source subject to this rule shall keep and maintain records for each permitted emission unit or groups of permitted emission units[4] sufficient to determine actual emissions. Such information shall be summarized in a monthly log, maintained on site for five years, and be made available to District, CARB, or U.S. EPA staff upon request.

A. Coating/Solvent Emission Unit

The owner or operator of a stationary source subject to this rule that contains a coating/solvent emission unit or uses a coating, solvent, ink or adhesive shall keep and maintain the following records:

1. A current list of all coatings, solvents, inks and adhesives in use. This list shall include: information on the manufacturer, brand, product name or code, VOC content in grams per liter or pounds per gallon, HAPS content in grams per liter or pounds per gallon, or manufacturer's product specifications, material VOC content reports or laboratory analyses providing this information;

2. A description of any equipment used during and after coating/solvent application, including type, make and model; maximum design process rate or throughput; control device(s) type and description (if any); and a description of the coating/solvent application/drying method(s) employed;

3. A monthly log of the consumption of each solvent (including solvents used in clean-up and surface preparation), coating, ink and adhesive used; and

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[4]In some cases it may be appropriate to keep records on groups of emission units which are connected in series. Examples are internal combustion engines in the oil fields with a common fuel line, or a series of paint spray booths with a common feed.

4. All purchase orders, invoices, and other documents to support information in the monthly log.

B. Organic Liquid Storage Unit

The owner or operator of a stationary source subject to this rule that contains a permitted organic liquid storage unit shall keep and maintain the following records:

1. A monthly log identifying the liquid stored and monthly throughput; and

2. Information on the tank design and specifications including control equipment.

C. Combustion Emission Unit

The owner or operator of a stationary source subject to this rule that contains a combustion emission unit shall keep and maintain the following records:

1. Information on equipment type, make and model, maximum design process rate or maximum power input/output, minimum operating temperature (for thermal oxidizers) and capacity, control device(s) type and description (if any) and all source test information; and

2. A monthly log of hours of operation, fuel type, fuel usage, fuel heating value (for non-fossil fuels; in terms of BTU/lb or BTU/gal), percent sulfur for fuel oil and coal, and percent nitrogen for coal.

D. Emission Control Unit

The owner or operator of a stationary source subject to this rule that contains an emission control unit shall keep and maintain the following records:

1. Information on equipment type and description, make and model, and emission units served by the control unit;

2. Information on equipment design including where applicable: pollutant(s) controlled; control effectiveness; maximum design or rated capacity; inlet and outlet temperatures, and concentrations for each pollutant controlled; catalyst data

(type, material, life, volume, space velocity, ammonia injection rate and temperature); baghouse data (design, cleaning method, fabric material, flow rate, air/cloth ratio); electrostatic precipitator data (number of fields, cleaning method, and power input); scrubber data (type, design, sorbent type, pressure drop); other design data as appropriate; all source test information; and

3. A monthly log of hours of operation including notation of any control equipment breakdowns, upsets, repairs, maintenance and any other deviations from design parameters.

E. General Emission Unit

The owner or operator of a stationary source subject to this rule that contains an emission unit not included in subsections A, B or C above shall keep and maintain the following records:

1. Information on the process and equipment including the following: equipment type, description, make and model; maximum design process rate or throughput; control device(s) type and description (if any);

2. Any additional information requested in writing by the APCO;

3. A monthly log of operating hours, each raw material used and its amount, each product produced and its production rate; and

4. Purchase orders, invoices, and other documents to support information in the monthly log.

5.0 **REPORTING REQUIREMENTS**

5.1 At the time of annual renewal of a permit to operate under Rule _____ (the District's general permitting rule), each owner or operator of a stationary source subject to this rule shall submit to the District a process statement. The statement shall be signed by the owner or operator and certify that the information provided is accurate and true.

5.2 For the purpose of determining compliance with this rule, this requirement shall not apply to stationary sources which emit in every 12-month period less than or equal to the following quantities:

A. For any regulated air pollutant (excluding HAPs),

1. 25 tons per year including a regulated air pollutant for which the District has a federal area designation of attainment, unclassified, transitional, or moderate nonattainment,

2. 15 tons per year for a regulated air pollutant for which the District has a federal area designation of serious nonattainment,

3. 6.25 tons per year for a regulated air pollutant for which the District has a federal area designation of severe nonattainment,

B. 2.5 tons per year of a single HAP,

C. 6.25 tons per year of any combination of HAPs, and

D. 25 percent of any lesser threshold for a single HAP as the U.S. EPA may establish by rule.

5.3 A stationary source previously covered by provisions in section 5.2 above shall comply with the provisions of section 5.1 above if the stationary source exceeds the quantities specified in section 5.2.

5.4 Any additional information requested by the APCO under section 5.1 above shall be submitted to the APCO within 30 days of the date of request.

6.0 ALTERNATIVE OPERATIONAL LIMIT AND REQUIREMENTS

[The District may propose additional alternative operational limits]

The owner or operator may operate the permitted emission units at a stationary source subject to this rule under any one alternative operational limit, provided that at least 90 percent of the stationary source's emissions in every 12-month period are associated with the operation(s) limited by the alternative operational limit.

6.1 Upon choosing to operate a stationary source subject to this rule under any one alternative operational limit, the owner or operator shall operate the stationary source in compliance with the alternative operational limit and comply with the specified recordkeeping and reporting requirements.

A. The owner or operator shall report within 24 hours to the APCO any exceedance of the alternative operational limit.

B. The owner or operator shall maintain all purchase orders, invoices, and other documents to support information required to be maintained in a monthly log. Records required under this section shall be maintained on site for five years and be made available to District or U.S. EPA staff upon request.

C. Gasoline Dispensing Facility Equipment with Phase I and II Vapor Recovery Systems

The owner or operator shall operate the gasoline dispensing equipment in compliance with the following requirements:

1. No more than 7,000,000 gallons of gasoline shall be dispensed in every 12-month period.

2. A monthly log of gallons of gasoline dispensed in the preceding month with a monthly calculation of the total gallons dispensed in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

D. Degreasing or Solvent-Using Unit

The owner or operator shall operate the degreasing or solvent-using unit(s) in compliance with the following requirements:

1. a. If the solvents do not include methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, no more than 5,400 gallons of any combination of solvent-containing materials and no more than 2,200 gallons of any one solvent-containing material shall be used in every 12-month period,.

   b. If the solvents include methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, no more than 2,900 gallons of any combination of solvent-containing materials and no more than 1,200 gallons of any one solvent-containing material shall be used in every 12-month period.

2. A monthly log of amount and type of solvent used in the preceding month with a monthly calculation of the total gallons used in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

E. Paint Spraying Unit[5]

The owner or operator shall operate the paint spraying unit(s) in compliance with the following requirements:

1. The total usage rate of all VOC-containing materials, including but not limited to, coatings, thinners, reducers, and cleanup solution shall not exceed _____ gallons in every 12-month period.

2. A monthly log of the gallons of VOC-containing materials used in the preceding month with a

[5]To be determined based on District SIP rules

monthly calculation of the total gallons used in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

F. Diesel-Fueled Emergency Standby Engine(s) with Output Less Than 1,000 Brake Horsepower

[Depending on the District's federal ozone attainment status, the District will adopt either subsection 1.a, 1.b, or 1.c below.]

The owner or operator shall operate the emergency standby engine(s) in compliance with the following requirements:

1. a. For a federal ozone area designation of attainment, unclassified, transitional, or moderate nonattainment, the emergency standby engine(s) shall not operate more than 5,200 hours in every 12-month period and shall not use more than 265,000 gallons of diesel fuel in every 12-month period.

   b. For a federal ozone nonattainment area classified as serious, the emergency standby engine(s) shall not operate more than 2,600 hours in every 12-month period and shall not use more than 133,000 gallons of diesel fuel in every 12-month period.

   c. For a federal ozone nonattainment area classified as severe, the emergency standby engine(s) shall not operate more than 1,300 hours in 12-month period and shall not use more than 66,000 gallons of diesel fuel in every 12-month period.

2. A monthly log of hours of operation, gallons of fuel used, and a monthly calculation of the total hours operated and gallons of fuel used in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

6.2 The owner or operator of a stationary source subject to this rule shall obtain any necessary permits prior to commencing any physical or operational change or activity which will result in an exceedance of an applicable operational limit specified in section 6.1 above.

7.0 VIOLATIONS

7.1 Failure to comply with any of the applicable provisions of this rule shall constitute a violation of this rule. Each day during which a violation of this rule occurs is a separate offense.

7.2 A stationary source subject to this rule shall be subject to applicable federal requirements for a major source, including Rule ____ (District Title V rule) when the conditions specified in either subsections A or B below, occur:

A. Commencing on the first day following every 12-month period in which the stationary source exceeds a limit specified in section 3.1 above and any applicable alternative operational limit specified in section 6.1, above, or

B. Commencing on the first day following every 12-month period in which the owner or operator can not demonstrate that the stationary source is in compliance with the limits in section 3.1 above or any applicable alternative operational limit specified in section 6.1 above.

Attachment 3
November 2, 1994 Letter Describing Use of Minor NSR Programs

Mr. Jason Grumet
Executive Director, Northeast States
for Coordinated Air Use Management
129 Portland Street
Boston, Massachusetts 02114

Dear Mr. Grumet:

This is in response to Mr. Michael Bradley's March 22, 1994 letter to Mary Nichols seeking clarification of the Federal enforceability of State's existing minor new source review (NSR) programs. It is my understanding that some of the NESCAUM States are interested in using their existing minor NSR programs to limit a source's potential to emit so as to allow sources to legally avoid being considered a major source for title V purposes.

In my November 3, 1993 memorandum entitled "Approaches to Creating Federally-Enforceable Emission Limits," I described approaches that States could use to limit a source's potential to emit for title V purposes. While a number of approaches are acceptable, the Environmental Protection Agency (EPA) has promoted the use of State operating permits programs approved under sections 110 and 112(l), pursuant to the criteria set forth in the June 28, 1989 Federal Register. Among other things, these criteria include an opportunity for public and EPA review and require that permit conditions be practically enforceable. Several States have followed EPA's recommendation and have either adopted these requirements or are in the process of doing so.

The Agency recognizes the use of other approaches as well. In response to your question, EPA's position is that minor NSR permits issued under programs that have already been approved into the State implementation plan (SIP) are federally enforceable. Thus, EPA allows the use of federally-enforceable minor NSR permits to limit a source's potential to emit provided that the scope of a State's program allows for this and that the minor NSR permits are in fact enforceable as a practical matter.

Because minor NSR programs are essentially preconstruction review programs for new sources and modifications to existing sources, minor NSR programs can generally be used to limit a

source's potential emissions when such limits are taken in conjunction with a preconstruction permit action. In addition, please note that the term "modification" generally encompasses both physical changes and changes in the method of operation at an existing source (see Clean Air Act section 111(a)(4)). Thus, the scope of some, though not all, minor NSR programs is broad enough to be used to also limit a source's potential to emit for nonconstruction-related events. This occurs where the modification component of State programs extends to both physical changes and changes in the method of operation. In these cases, where a voluntary reduction in the method of operation (e.g., limit in hours of operation or production rate) by itself is considered a modification for minor NSR permitting, a source may reduce its hours of operation or production rate and make such a change federally enforceable through limits in its minor NSR permit.

Some States' minor NSR programs are written so as to preclude a source from limiting its potential to emit absent an increase in emissions. There may be other limitations on the scope of these programs as well. Since there is considerable variation among State minor NSR programs, a review of any individual State program would be necessary to determine its ability to limit a source's potential to emit. It may be beneficial for States to contact the appropriate EPA Regional Office if there are questions about the scope of the SIP-approved minor NSR program.

Minor NSR programs have generally been used in the past to limit a source's potential to emit for criteria pollutants. There is a growing need for sources to limit their potential to emit for toxic pollutants as well. The EPA is currently considering ways in which a State may limit the potential to emit of toxic pollutants, including possible uses of existing minor NSR programs. I plan to keep you and others aware of our efforts in this regard.

You should also be aware that a recent court ruling has called into question the Federal enforceability of a State minor NSR permit that does not meet the public participation requirements of current EPA regulations despite SIP approval of the State's program [see United States v. Marine Shale Processors, No. 90-1240 (E.D. La.) (bench ruling), June 15, 1994]. In that case involving extensive alleged violations of the permit terms, the court held that EPA could not enforce the terms of the minor NSR permit. The court subsequently ruled that the company could not rely on the permit to limit its potential to emit, and thus was liable for having failed to obtain a major

NSR permit. The outcome of this case suggests that States should proceed cautiously in relying on minor NSR programs to limit potential to emit where the program does not actually provide public participation.

In summary, EPA has provided guidance on approaches that are available to limit a source's potential to emit. The Agency recommends approaches that meet the criteria set forth in the June 28, 1989 Federal Register. Many States are taking action to adopt such programs. With respect to minor NSR permits, EPA believes that permits conditions issued in accordance with existing State minor NSR programs that have been approved into the SIP, and which are enforceable as a practical matter, are federally enforceable and can be used to limit potential to emit. Caution is advised, however, with respect to permits that do not meet procedural requirements. These programs are primarily preconstruction review programs although in many cases they can also limit a source's potential to emit in conjunction with operational changes.

As you have noted, title V issues are complicated and resource intensive. In order for the title V program to be successfully implemented, it is important that States and EPA work cooperatively in developing operating permits programs. Your comments and recommendations on program development issues are welcome.

We appreciate this opportunity to be of service and trust that this information will be helpful to you.

Sincerely,

John S. Seitz
Director
Office of Air Quality Planning
and Standards

cc: Air Division Director, Regions I-X

Attachment 4
January 25, 1995 Guidance on Practicable Enforceability

SUBJECT: Guidance on Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits

FROM: Kathie A. Stein, Director
Air Enforcement Division

TO: Director, Air, Pesticides and Toxics
Management Division, Regions I and IV
Director, Air and Waste Management Division,
Region II
Director, Air, Radiation and Toxics Division,
Region III
Director, Air and Radiation Division,
Region V
Director, Air, Pesticides and Toxics Division,
Region VI
Director, Air and Toxics Division,
Regions VII, VIII, IX, and X

Attached is a guidance document developed over the past year by the former Stationary Source Compliance Division in coordination with the Air Enforcement Division, Office of Air Quality Planning and Standards, OAR's Office of Policy Analysis and Review, and the Office of General Counsel, as well as with significant input from several Regions.

A number of permitting authorities have begun discussions with or have submitted programs for review by EPA that would provide alternative mechanisms for limiting potential to emit. Several authorities have submitted SIP rules and at least one State has been developing a State general permit approach. We believe that this guidance is important to assist the EPA Regions as well as States in approving and developing such approaches.

For additional information regarding this guidance, please contact me or Clara Poffenberger of my staff at (202) 564-8709.

cc: John Rasnic, Director
Manufacturing, Energy, and Transportation Division
Office of Compliance

Air Branch Chiefs, Regions I - X

Enforceability Requirements for Limiting Potential to Emit Through SIP and §112 Rules and General Permits

Introduction

As several EPA guidances describe, there are several mechanisms available for sources to limit potential to emit. EPA guidances have also described the importance of practical enforceability of the means used to limit potential to emit. This guidance is intended to provide additional guidance on practical enforceability for such limits. We provide references for guidances on practical enforceability for permits and rules in general and provide guidance in this document for application of the same principles to "limitations established by rule or general permit," as described in the guidance document issued January 25, 1995, entitled "Options for Limiting Potential to Emit (PTE) of a Stationary Source under section 112 and Title V of the Clean Air Act (Act)." The description is as follows:

Limitations established by rules. For less complex plant sites, and for source categories involving relatively few operations that are similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally enforceable restrictions. One approach that has been used is to establish a general rule which creates federally enforceable restrictions at one time for many sources (these rules have been referred to as "prohibitory" or "exclusionary" rules[1]). The concept of exclusionary rules is described in detail in the November 3, 1993 memorandum ["Approaches to Creating Federally Enforceable Emissions Limits," from John S. Seitz]. A specific suggested approach for VOC limits by rule was described in EPA's memorandum dated October 15, 1993 entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based Upon Volatile Organic Compound (VOC) Use." An example of such an exclusionary rule is a model rule developed for use in California. (The California model rule is attached, along with a discussion of its applicability to other situations--see Attachment 2). Exclusionary rules are included in a State's SIP or 112 program and generally become effective upon approval by the EPA.

General permits. A concept similar to the exclusionary rule is the establishment of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit could provide for emission limitations in a one-time permitting process, and thus avoid the need to issue separate permits for each source. Although this concept is generally thought of as an element of Title V permit programs, there is no reason that a State or local agency could not submit a general permit program as a SIP submittal aimed at creating synthetic minor sources. Additionally, FESOP [Federally Enforceable State Operating Permit, usually referring to Title I State Operating Permit Programs approved under the criteria established by EPA in the June 28, 1989 Federal Register notice, 54 FR 27274] programs can include general permits as an element of the FESOP program being approved into the SIP. The advantage of a SIP general permit, when compared to an exclusionary rule,

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[1] The EPA prefers the term "exclusionary rule" in that this phrase is a less ambiguous description of the overall purpose of these rules.

> is that upon approval by the EPA of the State's general permit program, a general permit could be written for an additional source type without triggering the need for the formal SIP revision process. (January 25, 1995, Seitz and Van Heuvelen memorandum, page 4.)

SIP or § 112 Rules

Source-category standards approved in the SIP or under 112, if enforceable as a practical matter, can be used as federally enforceable limits on potential to emit. Such provisions require public participation and EPA review. Once a specific source qualifies under the applicability requirements of the source-category rule, additional public participation is not required to make the limits federally enforceable as a matter of legal sufficiency since the rule itself underwent public participation and EPA review. The rule must still be enforceable as a practical matter in order to be considered federally enforceable. A source that violates this type of rule limiting potential to emit below major source thresholds or is later determined not to qualify for coverage under the rule, could be subject to enforcement action for violation of the rule and for constructing or operating without a proper permit (a part 70 permit, a New Source Review permit, or operating without meeting §112 requirements, or any combination thereof).

General Permits

The Title V regulations set out provisions for general permits covering numerous similar sources. The primary purpose of general permits is to provide a permitting alternative where the normal permitting process would be overly burdensome, such as for area sources under section 112. General permits may be issued to cover any category of numerous similar sources, including major sources, provided that such sources meet certain criteria laid out in 40 CFR part 70. Sources may be issued general permits strictly for the purpose of avoiding classification as a major source. In other words, general permits may be used to limit the potential to emit for numerous similar sources. However, general permits must also meet both legal and practical federal enforceability requirements.

With respect to legal sufficiency, the operating permit regulations provide that once the general permit has been issued after opportunity for public participation and EPA and affected State review, the permitting authority may grant or deny a source's request to be covered by a general permit without further public participation or EPA or affected State review. The action of granting or denying the source's request is not subject to judicial review. A general permit does not carry a

permit shield. A source may be subject to enforcement action for operating without a part 70 permit if the source is later determined not to qualify for coverage under the general permit. Sources covered by general permits must comply with all part 70 requirements.

State SIP or 112(l) General Permits

Another mechanism available to limit potential to emit is a general permit program approved into the SIP or under section 112(l), the hazardous air pollutant program authority. This mechanism allows permitting authorities to issue and revise general permits consistent with SIP or 112(l) program requirements without going through the SIP or 112(l) approval process for each general permit or revision of a general permit. The program is also separate from title V, like title I state operating permits, and issuance and revisions of the permits are not required to comply with title V procedures.

Once a program is approved, issuing and revising general permits should be significantly less burdensome and time-consuming for State legislative and rulemaking authorities. The EPA review should also be less burdensome and time-consuming. After a program is approved, permitting authorities have the flexibility to submit and issue general permits as needed rather than submitting them all at once as part of a SIP submittal. Given the reduced procedural burden, permitting authorities should be able to issue general permits to small groups or categories or sources rather than attempt to cover broad categories with a generic rule. We anticipate that specific permit requirements for general permits may be readily developed with the assistance of interested industry groups.

The State general permit approach may allow sources to meet the federal enforceability requirements more easily than other approaches. However, to use this approach, States must have a federally enforceable program that provides the State the authority to issue such permits; to accomplish this, EPA must approve the program into the SIP or pursuant to section 112(l) of the Clean Air Act.

Enforceability Principles

In 1989, in response to challenges from the Chemical Manufacturers Association and other industry groups, EPA reiterated its position that controls and limitations used to limit a source's potential to emit must be federally enforceable. See 54 FR 27274 (June 28, 1989). Federally enforceable limits can be established by Clean Air Act programs such as NSPS, NESHAPs, MACTs, and SIP requirements. However, source-specific

limits are generally set forth in permits. Generally, to be considered federally enforceable, the permitting program must be approved by EPA into the SIP and include provisions for public participation. In addition, permit terms and conditions must be practicably enforceable to be considered federally enforceable. EPA provided specific guidance on federally enforceable permit conditions in a June 13, 1989 policy memo "Limiting Potential to Emit in New Source Permitting" from John Seitz and in the June 28, 1989 Federal Register notice (54 FR 27274). Additional guidance can also be found in United States v. Louisiana Pacific, 682 F. Supp. 1122 (D. Colo. 1987), 682 F. Supp 1141 (D. Colo. 1988), which led to these guidance statements and a number of other memoranda covering practicable enforceability as it relates to rolling averages, short-term averages, and emission caps. See "Use of Long Term Rolling Averages to Limit Potential to Emit," from John B. Rasnic to David Kee, February 24, 1992; "Limiting Potential to Emit" from Mamie Miller to George Czerniak, August 5, 1992; "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project", from John B. Rasnic to David Kee, March 13, 1992; and "3M Tape Manufacturing Division Plant, St. Paul, Minnesota" from John B. Rasnic to David Kee, July 14, 1992.

In 1987, EPA laid out enforceability criteria that SIP rules must meet. See "Review of State Implementation Plans and Revisions for Enforceability and Legal Sufficiency" from Michael Alushin, Alan Eckert, and John Seitz, September 3, 1987 (1987 SIP memo). The criteria include clear statements as to applicability, specificity as to the standard that must be met, explicit statements of the compliance time frames (e.g. hourly, daily, monthly, or 12-month averages, etc.), that the time frame and method of compliance employed must be sufficient to protect the standard involved, recordkeeping requirements must be specified, and equivalency provisions must meet certain requirements.

Based on these precedents, this guidance describes six enforceability criteria which a rule or a general permit must meet to make limits enforceable as a practical matter. In general, practical enforceability for a source-specific permit term means that the provision must specify (1) a technically accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, annually); and (3) the method to determine compliance including appropriate monitoring, recordkeeping and reporting. For rules and general permits that apply to categories of sources, practical enforceability additionally requires that the provision (4) identify the categories of sources that are covered by the rule; (5) where coverage is optional, provide for notice to the permitting authority of the

source's election to be covered by the rule; and (6) recognize the enforcement consequences relevant to the rule.

This guidance will address requirements (4) and (5) first as they are concepts that are unique to rules and general permits.

A. Specific Applicability

Rules and general permits designed to limit potential to emit must be specific as to the emission units or sources covered by the rule or permit. In other words, the rule or permit must clearly identify the category(ies) of sources that qualify for the rule's coverage. The rule must apply to categories of sources that are defined specifically or narrowly enough so that specific limits and compliance monitoring techniques can be identified and achieved by all sources in the categories defined.

A rule or general permit that covers a homogeneous group of sources should allow standards to be set that limit potential to emit and provide the specific monitoring requirements. (Monitoring is more fully addressed in section D.) The State can allow for generic control efficiencies where technically sound and appropriate, depending on the extent of the application and ability to monitor compliance with resultant emission limits. Similarly, specific and narrow applicability may allow generic limits on material usage or limits on hours of operation to be sufficient. For example, a rule or general permit that applies to fossil-fuel fired boilers of a certain size may allow for limits on material usage, such as fuel-type and quantity. A rule or general permit that applies only to standby diesel generators or emergency generators may allow restrictions on hours of operation to limit potential to emit. The necessary compliance terms (i.e., monitoring or recordkeeping) associated with any of these limits, such as with hours of operation, can readily be specified in the rule or the general permit itself.

General permits under Title V are assumed to include this enforceability principle because the Part 70 regulations set out specific criteria that States should consider in developing their general permit provisions (See 57 FR 32278). These factors include requirements that

> "categories of sources covered by general permits should be generally homogenous in terms of operations, processes, and emissions. All sources in the category should have essentially similar operations or processes and emit pollutants with similar characteristics."

Another factor stated is "sources should be subject to the same or substantially similar requirements governing operation, emissions, monitoring, reporting, or recordkeeping." Examples of

source categories appropriate for general permits include: degreasers, dry cleaners, small heating systems, sheet fed printers, and VOC storage tanks (see 57 FR 32278).

B. Reporting or Notice to Permitting Authority

The rule or general permit should provide specific reporting requirements as part of the compliance method. Although the compliance method for all sources must include recordkeeping requirements, the permitting authority may make a determination that reporting requirements for small sources would provide minimal additional compliance assurance. Where ongoing reporting requirements are determined not to be reasonable for a category of sources, the rule or general permit should still provide that the source notify the permitting authority of its coverage by the rule or the permit. In the limited situation where all the sources described in a source category are required to comply with the all of the provisions of a rule or general permit, notice is not needed. However, where there are no reporting requirements and no opt-in provisions, the permitting authority must provide the public with the names and locations of sources subject to the rule or permit.

For Title V general permits, Part 70 requires sources to submit an application for a general permit which must be approved or disapproved by the permitting authority. For SIP or §112 rules and SIP or §112 general permits, in response to receiving the notice or application, the permitting authority may issue an individual permit, or alternatively, a letter or certification. The permitting authority may also determine initially whether it will issue a response for each individual application or notice, and may initially specify a reasonable time period after which a source that has submitted an application or notice will be deemed to be authorized to operate under the general permit or SIP or §112 rule.

C. Specific Technically Accurate Limits

The rule or general permit issued pursuant to the SIP or §112 must specify technically accurate limits on the potential to emit. The rule or general permit must clearly specify the limits that apply, and include the specific associated compliance monitoring. (The compliance monitoring requirements are discussed further in the next section.) The standards or limits must be technically specific and accurate to limit potential to emit, identifying any allowed deviations.

The 1987 policy on SIP enforceability states that limitations "must be sufficiently specific so that a source is fairly on notice as to the standard it must meet." For example, "alternative equivalent technique" provisions should not be approved without clarification concerning the time period over which equivalency is measured as well as whether the equivalency applies on a per source or per line basis or is facility-wide.

Further, for potential to emit limitations, the standards set must be technically sufficient to provide assurance to EPA and the public that they actually represent a limitation on the potential to emit for the category of sources identified. Any presumption for control efficiency must be technically accurate and the rule must provide the specific parameters as enforceable limits to assure that the control efficiency will be met. For example, rules setting presumptive efficiencies for incineration controls applied to a specific or broad category must state the operating temperature limits or range, the air flow, or any other parameters that may affect the efficiency on which the presumptive efficiency is based. Similarly, material usage limits such as fuel limits, as stated above, require specifying the type of fuel and may require specifying other operating parameters.

A rule that allows sources to submit the specific parameters and associated limits to be monitored may not be enforceable because the rule itself does not set specific technical limits. The submission of these voluntarily accepted limits on parameters or monitoring requirements would need to be federally enforceable. Absent a source-specific permit and appropriate review and public participation of the limits, such a rule is not consistent with the EPA's enforceability principles.

D. Specific Compliance Monitoring

The rule must specify the methods to determine compliance. Specifically, the rule must state the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods as appropriate for each potential to emit limitation; and

clarify which methods are used for making a direct determination of compliance with the potential to emit limitations. "Monitoring" refers to many different types of data collection, including continuous emission or opacity monitoring, and measurements of various parameters of process or control devices (e.g. temperature, pressure drop, fuel usage) and recordkeeping of parameters that have been limited, such as hours of operation, production levels, or raw material usage. Without a verifiable plantwide emission limit, verifiable emission limits must be assigned to each unit or group of units subject to the rule or general permit. Where monitoring cannot be used to determine emissions directly, limits on appropriate operating parameters must be established for the units or source, and monitoring must verify compliance with those limits. The monitoring must be sufficient to yield data from the relevant time period that is representative of the source's compliance with the standard or limit. Continuous emissions monitoring, especially in the case of smaller sources, is not required.

E. Practicably Enforceable Averaging Times

The averaging time for all limits must be practicably enforceable. In other words, the averaging time period must readily allow for determination of compliance. EPA policy expresses a preference toward short term limits, generally daily but not to exceed one month. However, EPA policy allows for rolling limits not to exceed 12 months or 365 days where the permitting authority finds that the limit provides an assurance that compliance can be readily determined and verified. See June 13, 1989 "Guidance on Limiting Potential to Emit," February 24, 1992 Memorandum "Use of Long Term Rolling Averages to Limit Potential to Emit" from John Rasnic to David Kee, and March 13, 1992 "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project" from John B. Rasnic to David Kee, stating that determinations to allow an annual rolling average versus a shorter term limit must be made on a case by case basis. Various factors weigh in favor of allowing a long term rolling average, such as historically unpredictable variations in emissions. Other factors may weigh in favor of a shorter term limit, such as the inability to set interim limits during the first year. The permitting agency must make a determination as to what monitoring and averaging period is warranted for the particular source-category in light of how close the allowable emissions would be to the applicability threshold.

F. Clearly Recognized Enforcement

Violations of limits imposed by the rule or general permit that limit potential to emit constitute violations of major

source requirements. In other words, the source would be violating a "synthetic minor" requirement which may result in the source being treated as a major source under Titles I and V. The 1989 Federal Register Notice provides for separate enforcement and permitting treatment depending on whether the source subsequently chooses to become major or remain minor. Thus, violations of the rule or general permit or violation of the specific conditions of the rule or general permit subjects the source to potential enforcement under the Clean Air Act and state law. The operating permit rule states that notwithstanding the shield provisions of part 70, the source subject to a general permit may be subject to enforcement action for operating without a part 70 permit if the source is later determined not to qualify for the conditions and terms of the general permit. Moreover, violation of any of the conditions of the rule or general permit may result in a different determination of the source's potential to emit and thus may subject the source to major source requirements and to enforcement action for failure to comply with major source requirements from the initial determination.

Rule Requirements for State General Permit Programs

As discussed above, general permit programs must be submitted to EPA for approval under SIP authority or under section 112(l), or both, depending on its particular pollutant application. SIP and 112(l) approval and rulemaking procedures must be met, including public notice and comment. The specific application of the enforceability principles for establishing State SIP or §112(l) general permit programs require that the rule establishing the program set out these principles as rule requirements. In other words, these principles must be specific rule requirements to be met by each general permit.

The rule establishing the program must require that (1) general permits apply to a specific and narrow category of sources; (2) sources electing coverage under general permits, where coverage is not mandatory, provide notice or reporting to the permitting authority; (3) general permits provide specific and technically accurate (verifiable) limits that restrict the potential to emit; (4) general permits contain specific compliance monitoring requirements; (5) limits in general permits are established based on practicably enforceable averaging times; and (6) violations of the permit are considered violations of the State and federal requirements and may result in the source being subject to major source requirements.

In addition, since the rule establishing the program does not provide the specific standards to be met by the source, each general permit, but not each application under each general permit, must be issued pursuant to public and EPA notice and

comment. The 1989 Federal Register notice covering enforceability of operating permits requires that SIP operating permit programs issue permits pursuant to public and EPA notice and comment. Title V requires that permits, including general permits, be issued subject to EPA objection.

Finally, sources remain liable for compliance with major source requirements if the specific application of a general permit to the source does not limit the source's potential to emit below major source or major modification thresholds. (The limits provided in these mechanisms may actually limit the potential to emit of sources but may not limit the potential to emit for some sources to below the threshold necessary to avoid major source requirements. For example, a general permit for industrial boilers may in fact provide limits that are sufficient to bring a source with only two or three boilers to below the subject thresholds, but a source with more than three boilers may have a limited PTE but not limited below the major source threshold.) Also, where the source is required to use another mechanism to limit potential to emit, i.e., a construction permit, the general permit may not be relied upon by the source or the State to limit potential to emit.

Permits issued pursuant to the approved program, meeting the above requirements, are adequate to provide federally enforceable limits on potential to emit for New Source Review, title V, and section 112 programs as long as they are approved pursuant to SIP (section 110) and section 112(l) authorities.

Attachment 5
Example Language for Affirming Limits

[Note: the following language is taken from the Thursday December 17, 1992 Federal Register, page 59931. To place this excerpt into context, readers are encouraged to obtain the entire Federal Register notice]

> "The USEPA today finds the existing Illinois SIP regulations to be consistent with federal requirements. If the State followed its own procedures, each permit issued under this regulation was subject to public notice and prior USEPA review. Therefore, USEPA will consider all operating permits issued which were processed in a manner consistent with both the State regulations and the five criteria to be federally enforceable with the promulgation of this rule provided that any permits that the State wishes to make federally enforceable are submitted to USEPA and accompanied by documentation that the procedures approved today have been followed. USEPA will expeditiously review any individual permits so submitted to ensure their conformity to the program requirements."

July 10, 1995

MEMORANDUM

SUBJECT: White Paper for Streamlined Development of Part 70 Permit Applications

FROM: Lydia N. Wegman, Deputy Director /s/
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

Please find attached a White Paper on Part 70 permit applications. The paper is designed to streamline and simplify the development of part 70 permit applications. The guidance was developed to respond to the concerns of industry and permitting authorities that preparation of initial permit applications was proving more costly and burdensome than necessary to achieve the goals of the Title V permit program.

The White Paper provides several streamlining improvements. Among them, it allows industry to:

- Provide emissions descriptions, and not emissions estimates, for emissions not regulated at the source, unless such estimates are needed for other purposes such as calculating permit fees;

- Submit checklists, rather than emission descriptions, for insignificant activities based on size/production rate and for risk management plans potentially owed

under section 112(r);

- Provide citations for applicable requirements, with qualitative descriptions for each emissions unit, and for prior new source review (NSR) permits;

- Exclude certain trivial and short-term activities from permit applications;

- Provide group treatment for activities subject to certain generally-applicable requirements;

- Certify compliance status without requiring re-consideration of previous applicability decisions;

- Use the Part 70 permit process to identify environmentally significant terms of NSR permits, which should be incorporated into the part 70 permit as federally-enforceable terms; and

- Submit tons per year estimates only where meaningful to do so and not, for example, for section 112(r)-only pollutants; such estimates should be based on generally-available information rather than new studies or testing.

There is an immediate need for the implementation of this guidance. Increasing numbers of sources are becoming subject to the requirement to file a complete part 70 application as more State part 70 programs are approved. I strongly encourage you to work with your States to effect near-term use of the White Paper guidance to streamline the application process.

I want to thank you and your staff for your support in developing this guidance and invite your suggestions on what additional guidance is needed to improve further the initial implementation of title V. If you should have any questions regarding the attached guidance, please contact Michael Trutna at (919) 541-5345 or Jeff Herring at (919) 541-3195.

Attachment

cc: M. Trutna (MD-12)
J. Herring (MD-12)
A. Eckert (2344)
J. Domike (2242A)
A. Schwartz (2344)

WHITE PAPER FOR

STREAMLINED DEVELOPMENT OF PART 70 PERMIT APPLICATIONS

U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF AIR QUALITY PLANNING AND STANDARDS

July 10, 1995

Contacts: Michael Trutna (919) 541-5345
Jeff Herring (919) 541-3195

EPA WHITE PAPER FOR

STREAMLINED DEVELOPMENT OF PART 70 PERMIT APPLICATIONS

July 10, 1995

I. INTRODUCTION

The EPA is issuing this guidance to enable States to take immediate steps to reduce the costs of preparing and reviewing initial part 70 permit applications. A perceived lack of clarity in these requirements has led to an unintended escalation in permit application costs. Too often, sources have felt compelled to make conservative assumptions to assure themselves of receiving the "application shield" and avoiding enforcement actions.

Title V of the Clean Air Act (the Act) and its implementing regulations in part 70 set forth minimum requirements for State operating permit programs. In general, this program was not intended by Congress to be the source of new substantive requirements. Rather, operating permits required by title V are meant to accomplish the largely procedural task of identifying and recording existing substantive requirements applicable to regulated sources and to assure compliance with these existing requirements. Accordingly, operating permits and their accompanying applications should be vehicles for defining existing compliance obligations rather than for imposing new requirements or accomplishing other objectives.

There is an immediate need for this guidance. Most States and those local air pollution control agencies participating in the program (hereinafter referred to as "States") are expected to receive approval by the fall of 1995 of their part 70 operating permit programs to implement title V of the Act. As a result, most sources are in the process of preparing their initial applications, a number of sources have already submitted their initial applications, and a few part 70 permits have already been issued. As programs start to be implemented, concerns are being raised by States and sources as to the expectations for complete permit applications and permit content, the intended scope of the program, and the respective responsibilities of sources, permitting authorities, and the Environmental Protection Agency (EPA) in making implementation decisions in accomplishing permit issuance.

The EPA recognizes that the burden for filing a complete application may vary significantly among States as does the nature of their applicable requirements, status of source

compliance, air quality conditions, the type of permit fee schedule, and the size and complexity of their industry. However, EPA believes that the mentioned problems, if unaddressed, would threaten implementation of the title V program, and thus warrant a timely response. The clarifications contained in this policy statement are made under the current part 70 regulations and should typically not require State rulemaking. The EPA strongly urges States to allow sources to take near term advantage of the flexibility provided by this paper, particularly during the initial implementation phase of the program. It is imperative that the provisions and clarifications of this paper are implemented by States as quickly as possible. Most States need not wait for EPA approval before implementing this guidance, however they are encouraged to consult with the appropriate EPA Regional Office as they adjust implementation of their programs.

Section II of this paper articulates how part 70 allows permitting authorities considerable flexibility to make decisions regarding the completeness of applications and their adequacy to support initial permit issuance. This guidance makes clear that the part 70 rules do not impose unreasonable permit application preparation burdens. In particular, it accomplishes application streamlining by enabling and encouraging the use of:

- Tons per year (tpy) estimates for emissions units and pollutant combinations subject to applicable requirements, and only where meaningful to do so (e.g., not for section 112(r)-only pollutants); such estimates can be based on generally-available information rather than new studies or testing;

- Emissions descriptions, not estimates, for emissions not regulated at the source (unless needed for permit fee calculation, for purposes of establishing a permit shield or a plantwide applicability limit (PAL), or for resolution of applicable requirement coverage or major source status);

- Checklists rather than emission descriptions for insignificant activities based on size/production rate and risk management plans potentially owed under section 112(r);

- Exclusions for certain trivial and short-term activities from permit applications (see Attachment A);

- Group treatment for activities subject to certain generally-applicable requirements;

- Part 70 permit process to reconcile which terms of existing new source review (NSR) permits should be incorporated into the part 70 permit as federally-enforceable terms;

- Citations for applicable requirements with qualitative descriptions for each emissions unit, and for prior NSR permits as they may be revised; and

- Certifications of compliance status which do not require re-evaluation of previous applicability decisions.

This paper affirms EPA's strong commitment to successful program implementation. It is the first in a series of policy statements intended to alleviate known implementation concerns within the framework of the existing part 70 regulations. At the same time, the Agency is developing rulemaking which will afford a new streamlined approach to part 70 permit revisions and provide other relief not possible under the current rule. The policies set out in this paper are intended solely as guidance, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party.

II. STREAMLINED DEVELOPMENT OF COMPLETE Part 70 APPLICATIONS

A. Current Requirements for Complete Applications (§ 70.5)

Within 12 months of the effective date of a part 70 program, all sources subject to the program must submit complete permit applications. The State may establish, and many have established, a phased schedule for application submittals.

Section 70.5(c)(3) requires a permit application to describe all emissions of pollutants for which a source is major and all emissions of regulated air pollutants. It also authorizes the permitting authority to obtain additional information as needed to verify which requirements are applicable to the source. Applications are also sometimes relied upon to evaluate the fee amount required under the approved permit fee schedule. Emissions information for these purposes does not always need to be detailed or precise. Information for applicability purposes need only be detailed enough to resolve any open questions about which requirements apply. Information for fee purposes only has to be consistent with what is required in applications by the permitting authority to implement its fee schedule. No information is needed when this activity is done outside the part 70 permit application process. Finally, in cases where the applicable requirement will be established or defined in the

part 70 permit (e.g., PAL), the part 70 permit application must contain additional information as needed to verify emissions levels and the basis for measuring changes from them.

Section 70.5(c) further requires the application to contain a compliance plan describing the compliance status of the source with respect to all applicable requirements. For sources that will not be in compliance at the time of permit issuance, the application must contain a narrative description of how the source will achieve compliance and a detailed schedule of remedial measures leading to compliance. If the source is in compliance, the application need only contain a statement that the source will continue to comply. For applicable requirements that will take effect during the permit term, the compliance plan may be a statement that the source will meet them. Each application must also include a certification of the source's compliance status with respect to each applicable requirement and a statement of the methods used for determining compliance. Finally, the responsible official must also certify that the application form and the compliance certification are true, accurate, and complete based on information and belief formed after reasonable inquiry.

Each part 70 program must contain criteria and streamlined procedures for determining when permit applications are complete. Applications for an initial part 70 permit may be considered complete if they have information sufficient to allow the permitting authority to begin processing the application. Unless the permitting authority determines that an application is not complete within 60 days, it will be considered complete by default. If the source submits a timely and complete application the source is shielded against penalties for operating without a permit until its part 70 permit is issued (i.e., the source is granted the "application shield").

Even after applications have been initially determined to be complete, the source must submit any additional information requested by the permitting authority to determine, or evaluate compliance with applicable requirements, within the reasonable timeframe allowed by the permitting authority, to maintain the effect of the application shield. In addition, until release of the draft permit, sources have an on-going responsibility to correct information or submit supplemental information needed to prepare the permit. The timeframe for updates will depend on the permitting authority's schedule for performing the technical review for a given application. The application shield once granted remains in effect until permit issuance even where the source augments its original application submittal in response to requests for more information by the permitting authority.

As mentioned, considerable confusion exists as to what constitutes a complete application under the requirements of part 70. Due to the significant new penalties for knowing violations and the extremely visible forum for processing permit applications, in the absence of clear guidance many sources have made or are making very conservative assumptions regarding their obligations. For example, many in the regulated community feel that a part 70 application can be complete only if it exhaustively catalogues every past and present emitting activity with great precision. Others fear that an application can never be complete since many Act requirements are still evolving, confusion exists as to which requirements are applicable to the source (e.g., what constitutes the State Implementation Plan (SIP)), or no monitoring data exists upon which to base the initial certification of compliance. Other concerns have been raised regarding the choice of emissions estimation techniques and the amount of information needed to support decisions of applicability or exemption, especially those involving the appropriate NSR for previous construction activities.

There is also a general apprehension that EPA will second guess any or all of these judgments during its review period and thereby impede the permit issuance process. Others are concerned that even if complete applications could be filed, they soon would grow obsolete and require updates before a draft permit could be prepared. In addition, there are concerns that EPA will issue guidance in the future which would establish extensive new requirements concerning the content of a complete application. As a result, worst-case assumptions for various determinations are being made effecting a level of rigidity and rigor as well as cost unintended by the current regulations.

This guidance is intended to correct these misunderstandings. It is intended to give States and sources direction on how States can reduce these burdens while achieving the requirements of title V. As previously stated, EPA believes that these streamlining ideas can and should be implemented under the current part 70 rule for most States. To the extent State forms reflect the current confusion, the Agency wishes to clarify the issues sufficiently for States to revise the portion of their forms implementing title V to be consistent with this guidance.

B. Content of Part 70 Permit Applications

1. Overview

This section describes the level of information which must be contained in a part 70 permit application for it to be considered complete. This guidance clarifies the minimum

requirements under the Federal regulations for acceptable part 70 permit applications. It grants a substantial degree of discretion to State permitting agencies. The EPA recognizes that different States may adopt different approaches to these minimum requirements depending on their local needs and circumstances, and that others may elect to go beyond those minimum requirements. However, at least in the initial program phase, EPA urges States to keep part 70 application requirements to the minimum needed to identify applicable requirements. In many instances, a qualitative description of emissions, or sometimes no description at all, will satisfy this standard.

This section specifically clarifies that there are different expectations for information from emissions units depending on whether and how applicable requirements apply. In addition, this section provides several policy clarifications aimed at lowering current application burdens associated with addressing insignificant activities, generic grouping of emissions units and activities, short-term activities, incorporation of current NSR permit conditions, section 112(r) requirements, and Research and Development (R&D) activities.

2. Required Emissions Information And Source Descriptions

Applications should contain information to the extent needed to determine major source status, to verify the applicability of part 70 or applicable requirements, to verify compliance with applicable requirements, and to compute a permit fee (as necessary). Section 70.5(c) requires the application to describe emissions of all regulated air pollutants for each emissions unit. This would require at least a qualitative description of all significant[1] emissions units, including those not regulated by applicable requirements.

While part 70 does not require detailed emissions inventory building, it does require limited emissions-related information for each pollutant and emissions unit combination which is regulated at the source. Section 70.5(c)(3)(iii) requires for such units emissions rate descriptions in tpy and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method. The EPA interprets the tpy estimates to not be required at all where they would

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[1]The term "significant" as used in this policy statement does not have the meaning as used in § 52.21 (e.g., 15 tpy PM-10, 40 tpy VOC) but rather means that the emissions unit does not qualify for treatment in the application as an insignificant emissions unit.

serve no useful purpose, where a quantifiable emissions rate is not applicable (e.g., section 112(r) requirements or a work practice standard), or where emissions units are subject to a generic requirement (see Section 4. Generic Grouping of Emissions Units and Activities).

On the other hand, more emissions information would presumptively be required to verify emissions levels and monitoring approaches where PALs or other plantwide emissions limits would be established or defined in part 70 permits. Another situation where additional emissions information might be needed is where the permitting authority would be granting the shield relative to a decision of non-applicability where a source is claiming an exemption based on an emissions level cutoff in a standard that has been issued for the category to which the emissions unit potentially belongs. In such cases additional information to support a determination that a requirement is not applicable may well be required. In addition, for the minority of States that use the part 70 application to determine the first year's permit fee, the application and its description of all regulated air pollutants for presumptive fee calculation must also be adequate for that purpose. Finally, additional emissions information might also be necessary in some cases to resolve a dispute over whether a particular requirement is applicable, or whether a source is major for a particular pollutant (additional information would not be necessary where a source would stipulate to the applicablity of the requirement and/or its major status).

Wherever emissions estimates are needed (unless the source independently decides to more accurately estimate emissions), use of available information should suffice. Any information that is sufficient to support a reasonable belief as to compliance or the applicability or non-applicability of requirements will be acceptable for these purposes. That could include AP-42 emission factors, emissions factors in other EPA documents, or reasonable engineering projections, as well as test data (see Section C. Quality of Required Information).

Any required tpy estimates are not to be included as federally-enforceable part 70 permit terms, unless otherwise required by an applicable requirement or requested by the source to avoid one. In addition, where tpy descriptions are needed, EPA does not believe that part 70 requires multiple forms of emissions estimates (i.e., actual allowable, and potential emissions). Also, where an emissions estimate is needed for part 70 purposes but is otherwise available (e.g., recent submittal of emissions inventory), then the permitting authority can allow the source to cross-reference this information for part 70 purposes.

Even if tpy estimates are not necessary, part 70 applications must describe all significant emissions units, including any which are not subject to any applicable requirement at any given emissions unit. Such unregulated emissions can include hazardous air pollutants (HAP) listed under section 112(b) of the Act and criteria pollutants that are unregulated for a particular emissions unit. A general description of emissions (i.e., simple identification of the significant pollutant or family of pollutants believed to be emitted by the emissions unit) should suffice. For part 70 purposes, the descriptions of emissions units themselves also can be quite general (i.e., descriptions need not contain information such as UTM coordinates or model and serial numbers for equipment, unless such information is needed to determine the applicability of, or to implement, an applicable requirement). Negative declarations are not required for pollutants that are not emitted by the emissions unit.

Some examples may help to illustrate where only source descriptions of regulated and unregulated emissions are necessary for title V purposes:

- An application for a de-greaser subject to a requirement to have a certain type of lid could describe the relevant applicable requirement and simply identify that it emits volatile organic compounds (VOC) and falls within the scope of the regulation. Quantification of the VOC emissions would not be necessary since the level of emissions is not relevant to the standard.

- An application for a storage tank subject to a requirement to have a certain type of seal, in addition to describing this requirement, would only need to generally identify the types of pollutants emitted, such as VOC and HAP generally.

- An application for a boiler that is grandfathered under the SIP could just identify that PM, SO2, NOx, VOC, lead, and HAP are emitted and that no applicable requirement is relevant.

3. Insignificant Activities

Section 70.5(c) allows the Administrator to approve as part of a State program a list of insignificant activities which need not be included in permit applications. For activities on the list, applicants may exclude from part 70 permit applications information that is not needed to determine (1) which applicable

requirements apply, (2) whether the source is in compliance with applicable requirements, or (3) whether the source is major. If insignificant activities are excluded because they fall below a certain size or production rate, the application must describe any such activities at the source which are included on the list. Even for such insignificant activities, the process for listing them in the application can be fairly simple. The permitting authority could allow the source merely to list in the application the kinds of insignificant activities that are present at the source or check them off from a list of insignificant activities approved in the program.

In addition to the insignificant activity provisions of § 70.5(c), there is flexibility inherent in § 70.5 to tailor the level of information required in the application to be commensurate with the need to determine applicable requirements. The EPA believes this inherent flexibility encompasses the idea that certain activities are clearly trivial (i.e., emissions units and activities without specific applicable requirements and with extremely small emissions) and can be omitted from the application even if they are not included on a list of insignificant activities approved in a State's part 70 program pursuant to § 70.5(c). Attachment A lists examples of activities which EPA believes should normally qualify as trivial in this sense. This list is intended only as a starting point for States to consider. The determination of whether any particular item should be on the State's trivial list may depend on State-specific factors (e.g., whether the activity is subject to the requirements of the SIP). Permitting authorities can also allow, on a case-by-case basis without EPA approval, exemptions similar to those activities identified in Attachment A. Additional exemptions, to the extent that the activities they cover are not clearly trivial, still need to be approved by EPA before being added to State lists of insignificant activities.

4. Generic Grouping of Emissions Units and Activities

Questions have arisen regarding whether emissions units and activities may be treated generically in the application and permit for certain broadly applicable requirements often found in the SIP. Examples of such requirements brought to EPA's attention include requirements that apply identically to all emissions units at a facility (e.g., source-wide opacity limits), general housekeeping requirements, and requirements that apply identical emissions limits to small units (e.g., process weight requirements). These requirements are sometimes referred to as "generic," because they apply and are enforced in the same manner for all subject units or activities.

These requirements can normally be adequately addressed in the permit application with minimal or no reference to any specific emissions unit or activity, provided that the scope of the requirement and the manner of its enforcement are clear. Even where such generic requirements attach to individual small emissions units or activities, requiring a unit-by-unit or activity-by-activity description of numerous units or activities would generally impose a paperwork burden that would not be compensated by any gain in the practical enforceability of such relatively simple requirements. Therefore, provided the applicant documents the applicability of these requirements and describes the compliance status as required by § 70.5(c), the individual emissions units or activities may be excluded from the application, provided no other requirement applies which would mandate a different result. Similarly, the part 70 permit which must assure compliance with the generic applicable requirement would be written without specificity to applicable emissions units or activities.

In EPA's view, the validity of this approach stems from the nature of these applicable requirements. Accordingly, EPA believes application of this principle for grouping subject activities together generically should not depend on whether those activities qualify as trivial or insignificant. Where the applicable requirement is amenable to this approach, that is, where (1) the class of activities or emissions units subject to the requirement can be unambiguously defined in a generic manner and where (2) effective enforceability of that requirement does not require a specific listing of subject units or activities, permitting authorities may follow this approach regardless of whether subject activities have been listed as trivial or insignificant.

A lengthy list of the types of requirements suitable for this treatment is not possible here because, among other reasons, the examples of which EPA is aware are SIP requirements, and so vary from State to State. Permitting authorities are in the best position to decide which SIP requirements can be treated in this generic fashion. However, permitting authorities may wish to consult with the EPA Regional office in advance to clarify any uncertainties.

5. Short-term Activities

States can treat many short-term activities (e.g., activities occurring infrequently and for a short duration at a part 70 source) subject to an applicable requirement in the same fashion as activities subject to a generic requirement (see previous discussion). Since these activities are not present at

the source during preparation of the permit, the most that can be expected is generic treatment in the application. For such activities, the application and permit would not include emissions unit specificity but instead would contain a general duty to meet all applicable requirements that would apply to any qualifying short-term activity. Short-term activities which are not subject to an applicable requirement should be classified as insignificant activities or would qualify as trivial, and so would not be included in either the part 70 application or permit.

For example, a contractor-run sandblasting operation that is subject to a SIP limit for particulate matter might be operated on an infrequent but recurring basis might qualify for the general duty approach. However, where such activities re-occur with considerable frequency, the permitting authority could require them to be included in the permit. The source would also be obligated to revise the permit if operation of any short-term activity would be in conflict with the permit. If short-term construction activities occur, the part 70 permit application would need to address them only if they are subject to the State's NSR program or are otherwise in conflict with the envisioned part 70 permit.

6. Determination of Applicable SIP Requirements

One of the undisputed challenges facing both State and the regulated community in their efforts to develop complete applications is the determination of the applicable SIP requirements for a part 70 source. In some situations, it may be difficult to identify all the requirements in the SIP which are applicable to a particular source. Applicants, after consultation with the permitting authority, should include in permit applications the State rules which, to the best of their knowledge, are in the SIP. A good faith estimate will be enough to support both a valid compliance certification and a "completeness" determination. Review by the permitting authority, EPA, and the public may provide additional insight into whether any other applicable requirements exist. Any additions should not affect the validity of the original permit application and its eligibility for the application shield or of the accompanying compliance certification. However, the source would have to update its certification to account for any subsequently identified SIP requirements.

At least one State has developed a checklist of its air rules and required the applicant to check off which ones apply and select appropriate codes for rationalizing which ones do not apply. This type of approach should aid the source in providing

in the part 70 application its understanding of what applicable requirements apply. Sources in such a State may rely on the checklist. The EPA has also provided a contractor to document the approved SIP for each State. Where an EPA compilation exists, sources may rely on it as well. This process is well underway for most States and permitting authorities and, in many cases, EPA Regional Offices can provide the rule citation of the State rules that have been approved as part of the SIP.

Where a State has adopted a rule that is pending approval by EPA into the SIP, sources (if advised by the permitting authority) could in their applications note that the corresponding State-only requirements will become federally enforceable upon SIP approval. The permitting authority during review of the application would be responsible for determining if the SIP had been approved. If so, then the permitting authority would incorporate the requirements into the federally-enforceable portion of the permit. If the requirements had not been approved into the SIP, the permitting authority could incorporate the pending requirements into the State-only enforceable portion of the permit and note that the requirements would become federally enforceable upon SIP approval. The federally-enforceable portion of the permit would include the existing SIP requirements and condition them to expire upon EPA approval of the SIP revision. Once the SIP revision is approved, the pending permit terms would become federally-enforceable and the permit terms based on the superseded SIP rule would become void.

7. Incorporation of Prior NSR Permit Terms and Conditions

This paper provides guidance to States and sources in devising a means to revise NSR permit terms as appropriate (including classification as a State-only enforceable term) in conjunction with the part 70 permit issuance process. As used here, "new source review" refers to all forms of preconstruction permitting under programs approved into the SIP, including minor and major NSR (e.g., prevention of significant deterioration). Section 70.2 defines any term or condition of a NSR permit issued under a Federal or SIP-approved NSR program as being an applicable requirement. The Agency has concluded, however, that only environmentally significant terms need to be included in part 70 permits. The EPA recognizes that NSR permits contain terms that are obsolete, extraneous, environmentally insignificant, or otherwise not required as part of the SIP or a federally-enforceable NSR program. Such terms, as subsequently explained, need not be incorporated into the part 70 permit to fulfill the purposes of the NSR and title V programs required under the Act.

Minor NSR, in particular, is a program which the State has discretion to mold as necessary to be consistent with the goals of the SIP. Therefore, the permitting authority has very broad discretion in determining the terms of minor NSR. This discretion also exists to a much lesser extent in crafting major NSR permits, since the Act and EPA regulations contain several express requirements for review of major subject sources. Many NSR permit terms written in the past for both minor and major NSR, however, were understandably not written with a view toward careful segregation of terms implementing the Act from State-only requirements.

The EPA believes that the part 70 permit issuance process, involving as it does review by the permitting authority, public, and EPA, presents an excellent opportunity for the permitting authority to make appropriate revisions to a NSR permit[2] contemporaneously with the issuance of the part 70 permit. The public participation procedures for issuance of a part 70 permit satisfy any procedural requirements of Federal law associated with any NSR permit revision. This parallel processing approach is also an excellent opportunity to minimize the administrative burden associated with such an exercise. By conducting a simultaneous revision to the NSR permit, the permitting authority would be revising the "applicable NSR requirement" for purposes of determining what must be included in the part 70 permit.

There are several factors which bound the available discretion of the permitting authority in deciding whether an NSR permit term is necessary and must be incorporated into the part 70 permit as a federally-enforceable condition. Certainly all NSR terms must be incorporated which are mandatory under EPA's governing regulations (e.g., best available control technology, lowest achievable emissions rate, and other applicable NSR emission limits), or are not mandatory under EPA regulations but are expressly required under the terms of the State's NSR program (e.g., new source performance standards (NSPS) and SIP emission limits, reporting and recordkeeping requirements[3]), or are voluntarily taken by the source to avoid

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[2]In many States, an NSR permit is subsequently converted to an operating permit leaving the preconstruction permit void. In other States, there is not a separate construction permit (i.e., single permit system). In either case the phrase "NSR permit" means the current permit in which the NSR applicable requirements reside.

[3]This does not preclude the possibility that certain federally-enforceable limits incorporated into the NSR permit may

an otherwise applicable requirement (e.g., emission limits used to create a "synthetic minor" source, to "net out" of major NSR, or to create tradeable offsets or other emission reduction credits).

On the other hand, other NSR permit terms and conditions may be patently obsolete and no longer relevant to the operation of the source, such as terms regulating construction activity during the building or modification of the source, where the construction is long completed and the statute of limitations on construction-phase activities has run out. These terms no longer serve a Federal purpose and need not be included as terms of the part 70 permit. Likewise, the State will also need to identify provisions from NSR permits that are not required under Federal law because they are unrelated to the purposes of the NSR program. Examples typically include odor limitations, and limitations on emissions of hazardous air pollutants where such limitations do not reflect a section 112 standard or a SIP criteria pollutant requirement. Where the State retains such conditions, it would draft the part 70 permit to specify that they are State-only conditions and incorporate them into the part 70 permit as such.

New source review permits are also likely to contain other terms that are not patently obsolete or irrelevant, but that the source and permitting authority agree are nevertheless extraneous, out-dated, or otherwise environmentally insignificant and inappropriate for inclusion in a federally-enforceable permit. Candidates for this exclusion include: (1) information incorporated by reference from an application for a preconstruction permit (to the extent this information is needed to enforce NSR permit terms it should be converted to terms in the part 70 permit), or (2) original terms of a preconstruction permit that has been superseded by other terms related to operation. The propriety of excluding other types of NSR permit terms will need to be evaluated on a case-by-case basis.

The EPA believes that the above parallel processing approach should be effective in most situations to incorporate the federally significant NSR permit terms into the part 70 permit in an efficient and workable way. However, the Agency recognizes that sources and permitting authorities may experience serious burden and timing concerns in accomplishing this process. Therefore, the Agency recommends the following approach, which

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qualify for generic treatment in the application and the permit as described in Section 4. Generic Grouping of Emissions Units and Activities.

EPA believes is consistent with the current part 70 rule. Under this approach, sources may in their part 70 permit applications, propose candidate terms from their current NSR permits which they reasonably believe should be considered for revision, deletion, or designation as being enforceable only by the State. Upon submittal of the application, the source would, as a Federal matter, only need to certify compliance status for those remaining NSR terms that it had earmarked for incorporation into the part 70 permit as federally-enforceable terms. The permitting authority, as part of the collaborative part 70 permit issuance process, would review the list of terms recommended in good faith by the source for deletion, revision, or State-only status and would ultimately agree or disagree with the source's proposal. Where the permitting authority decided that terms beyond those proposed as federally enforceable by the source should be retained to implement NSR, the source would be required to re-certify its application with respect to those NSR terms. Failure to do so within the timeframe required by the permitting authority would result in an inaccurate certification and the loss of the application shield.

The resolution of which NSR terms are to be incorporated should ideally be completed by the time of initial part 70 permit issuance. However, the resources available for timely issuance of thousands of part 70 permits may not be sufficient to achieve final resolution of NSR permit terms by permit issuance. Serious concerns have been raised by industry that they should not be subject to premature incorporation of these remaining permit terms into the part 70 permit. They believe that this could trigger, in many cases, inappropriate part 70 responsibilities (e.g., monitoring, reporting, and recordkeeping) for these terms.

The EPA believes that the current part 70 rule allows permitting authorities to address these concerns as well. Where States wish to extend the time in which to decide whether to revise, delete, or designate as State-only certain terms of current NSR permits, permitting authorities may stipulate in initial part 70 permits that any of those NSR terms so listed in the permit will be reviewed and be deleted, revised, or incorporated as federally-enforceable terms of the part 70 permit on or before a specified deadline (not later than the renewal of the permit). Prior to the deadline, the permitting authority would delete, revise, or make federally enforceable any terms that the State determined warranted such treatment. In the meantime, all other terms would continue to be enforceable under State law as terms of the NSR permit. The permitting authority would incorporate any NSR permit terms that were not deleted or designated as State-only into the federally enforceable portion of the part 70 permit consistent with its approved part 70 permit

revision procedures.

Finally the permitting authority may be required to add new terms to the part 70 permit to make any incorporated NSR permit terms enforceable from a practical standpoint, to reflect operation rather than construction, or to meet other part 70 requirements regarding the content of permits. Where a permitting authority has already converted the NSR permit into an existing State operating permit before incorporation into the part 70 permit, the terms of the current permit to operate will presumptively define how NSR permit terms should be incorporated into part 70 permits.

8. Section 112(r) Requirements

For sources otherwise required to obtain a part 70 permit, complete applications merely need to acknowledge (where appropriate) that the on-site storage and processing of section 112(r) chemicals may require the source to submit a section 112(r) risk management plan (RMP) when that requirement becomes applicable. This acknowledgment should be based on the "List of Regulated Substances and Their Thresholds" rule [59 FR 4478 (January 14, 1994)]. Sources are not required to quantify emissions of these substances (unless they are also pollutants listed under section 112(b), and such quantification is needed for fee collection purposes). To resolve issues of applicability, permitting authorities may ask for additional information from certain sources regarding materials stored and transferred and the amounts of chemicals used in certain processes if the source does not indicate its potential applicability with respect to the section 112(r) requirement to file an RMP.

9. Research and Development Activities

The EPA expects that R&D activities will generally be exempt from part 70 and not be involved in the part 70 application process since they are typically independent, non-major sources. The July 1992 part 70 preamble provided general guidance explaining that R & D activities could often be regarded as separate "sources" from any operation with which it were co-located (57 FR 32264 and 32269). The Agency is clarifying and confirming their substantial flexibility under the ongoing rulemaking action to revise part 70.

Some R&D activities can still be subject to part 70 because they are either individually major or a support facility making significant contributions to the product of a collocated major manufacturing facility. In addition, laboratory activities which

involve environmental and quality assurance/quality control sample analysis, as well as R&D, present similar permitting problems. Such activities should be eligible for classification as an insignificant activity if there are no applicable SIP requirements. Where applicable SIP requirements do apply, they typically consist of "work practice" (e.g., good laboratory practice) requirements. In this situation, permit applications would need to contain only statements acknowledging the applicability of, and certifying compliance with, these work practice requirements. There is no need for an extensive inventory of chemicals and activities or a detailed description of emissions from the R&D or laboratory activity. Similarly, there would be no need to monitor emissions as a part 70 permit responsibility.

10. Applications from Non-major Sources

Applications for non-major sources subject to part 70 can be less comprehensive than those for major sources. (Note that virtually all States have deferred the applicability of these sources as provided by part 70.) While permits for major sources must include all applicable requirements for all emissions units at the source, § 70.3(c)(2) stipulates that permits for non-major sources have to address only the requirements applicable to emissions units that cause the source to be subject to part 70 (e.g., requirements of sections 111 or 112 of the Act applicable to non-major sources). Other emissions units at non-major sources that do not trigger part 70 applicability, even if they are subject to applicable requirements, do not have to be included in the permit. Since permits for non-major sources do not have to include applicable requirements for emissions units that do not cause the source to be subject to part 70, no information on those units is needed in the permit application.

11. Supporting Information

The great majority of the detailed background information relied upon by the source to prepare the application need not be included in the application for it to be found complete. Even though certain emissions-related calculations [see § 70.5(c)(3)(viii)] are required, the application size can still be significantly reduced if the permitting authority allows the source to submit examples of calculations performed that illustrate the methodology used. Cost savings can be realized, even though the calculations are still performed, in that the efforts to exhaustively record them in the application can be omitted.

The permitting authority can request additional, more

detailed information needed to justify any questionable information or statement contained in the initial application or to write a comprehensive part 70 draft permit. Applications for permits which will establish a requirement uniquely found in the part 70 permit (such as an alternative reasonably available control technology (RACT) limit) would require more supporting information, including any required demonstration.

C. Quality of Required Information

The quality of emissions estimates where they are needed in the part 70 permit application depends on the reasonable availability of the necessary information and on the extent to which they are relied upon by the permitting authority to resolve disputed questions of major source status, applicability of requirements, and/or compliance with applicable requirements. In general, where estimates of emissions are necessary, reasonably-available information may be used.

Generally, the emissions factors contained in EPA's publication AP-42 and other EPA documents may be used to make any necessary calculation of emissions. When an acceptable range of values is defined for a general type of source situation, permitting authorities have considerable discretion to define the appropriate emissions factor value within that range. States are most often better able to make such decisions given their closer proximity to the particular source and its operation.

For purposes of certifying the truth and accuracy of the application, part 70 requires that emissions estimates be expressed in terms consistent with the applicable requirement. This does not mean that only test data is acceptable. Rather, the source may rely on any data using the same units and averaging times as in the test method. New testing is not required and emission factors are presumed to be acceptable for emissions calculations, but more accurate data are preferred if they are readily available. Emissions factors provided by permitting authorities are also allowed where EPA emission factors are missing or State or industry values provide greater accuracy. The applicant may also use other estimation methods (materials balance, source test, or continuous emissions monitoring (CEM) data) when emission estimates produced through the use of emission factors are not appropriate.

In disputed cases, the source may propose the least costly alternative estimation method as long as it will produce acceptable data. Owners and operators may propose use of emissions estimation methods of their choosing to the permitting authority when the resulting data is more accurate than that

obtained through the use of emissions factors. Sources are encouraged to contact the permitting authority to discuss the appropriate estimation techniques for a particular circumstance.

Emissions estimates when they are necessary for HAPs often become less precise below certain thresholds. The need for quantification or even estimation should therefore decrease the lower the levels are that are present. For example, VOC estimates based on manufacturer's safety data sheets may indicate that trace amounts of certain HAPs may be present. It is reasonable for the source to report these HAPs as present in trace amounts and not quantify them further or perform expensive testing procedures to collect more accurate data, unless the permitting authority requires otherwise. On the other hand, more precise estimates might be required to defend a position that a VOC source was below emissions cutoffs which subject it to a RACT requirement if the source appeared close to that threshold and it exact emissions level was in doubt.

D. Phase-In of Details for Completeness Determinations

Permitting authorities have considerable flexibility in processing the expected huge volume of permit applications so as to issue initial permits by the required deadline of 3 years after program approval. The § 70.5(c) requirement that a permit application will be complete only if it addresses all the information required in this section must be interpreted in light of the July 1992 preamble (which clarifies the § 70.5(c) requirement for completeness in terms of information needed by the permitting authority to begin processing of an application). Accordingly, the permitting authority may balance the need for information to support timely permit issuance pursuant to the schedule approved in the program against the workload associated with managing and updating as necessary the initially submitted information.

Sources must submit complete applications within 12 months of the effective date (i.e., 30 days after the Federal Register date where EPA approves the program) of a State part 70 program or on whatever schedule for application submittal the State establishes in its approved program for its sources. Permitting authorities may also require application submittals prior to part 70 program approval under State authority, however, a failure to comply with any application deadline earlier than the effective date for the program cannot be considered a violation of the Act.

The current rule allows permitting authorities to implement a two-step process for application completeness, first

determining an application to be administratively complete, then requiring application updates as needed to support draft permit preparation. For example, permitting authorities can initially find an application complete if it defines the applicable requirements, and major/minor source status; certifies compliance status with respect to all applicable requirements (subject to the limitation on this action provided for in Section H. Compliance Certification Issues); and allows the permitting authority to determine the approved permit issuance schedule. The application must also include a certification as to its truth, accuracy, and completeness. In any event, permitting authorities must award the application shield if the source submits a timely application which meets the criteria for completeness in § 70.5(c).

Under this approach, if the source has supplied at least initial information in all the areas required by the permit application form and has certified it appropriately, the permitting authority generally has flexibility to judge the application to be complete enough to begin processing. Accordingly, there should normally be no need for an applicant to submit an application many days in advance in order to build in extra time for an iterative process before the relevant submittal deadline. Sources scheduled for permitting during the first year of the transition schedule must submit any additional information as needed to meet fully the requirements of § 70.5(c) for completeness on a more immediate schedule so that their permit can be issued within that first year.

E. Updates to Initially Complete Applications Due to Change

Sources, to maintain their application's status as complete and therefore preserve the application shield, must respond to requests from the permitting authority for additional information to determine or evaluate compliance with applicable requirements within the reasonable timeframe established by the permitting authority. Where more information is needed in the permit application to continue its processing, permitting authorities may opt to add the additional information to the application themselves or require additional submittals from the source. Sources must promptly certify any additional information submitted by them and certify or revise any relevant information furnished by the permitting authority.

1. Changing Emissions Information

Updates to the initially complete application may be required if emissions information, such as revised emissions factors, changes or additional NSR projects are approved after an

application is submitted. The exact response required will depend in part on whether the change affects a source's applicable requirements or its compliance status and when it is discovered. If, after consultation with the permitting authority, it is determined that the applicability status of the source is affected by new emissions information (e.g., the change causes the source to become newly subject to applicable requirements or may affect its ability to comply with a current NSR permit condition), then the source must promptly submit the new information to the permitting authority, identify any new requirements that apply, and certify any change in the source's compliance status. The issuance of an NSR permit may also add a new applicable requirement that would need to be addressed by the part 70 permit.

If the new information is discovered before the draft permit has been issued, it should be submitted as an addendum to the application, and the draft permit should reflect the new information. The permitting authority and a source can agree on set intervals at which such updating is required in order to structure the process and make it more efficient. If new information is discovered after the draft permit has completed public review but before the proposed permit has been issued, the information should still be submitted, and it is the responsibility of the permitting authority to revise the permit accordingly.

If new information is discovered after the permit has been issued, the resulting change could, at the discretion of the permitting authority, be addressed as a permit revision or as a reopening. If the change would not allow a source to comply with its current permit, the source should initiate a permit revision.

If the information does not affect applicability of, or compliance with, any applicable requirement (e.g., only alters the tpy emissions estimates of regulated pollutants), the information need not be submitted until permit renewal. If the permitting authority requires submittal of new information earlier, however, then it must be submitted according to reasonable deadlines established by the permitting authority.

2. Other Changes

Other changes can also occur that would require the source, even absent a specific request from the permitting authority, to propose an update to an initially complete application. One example is where a new regulatory requirement becomes applicable to the source before the permit is issued.

F. Content Streamlining

1. Cross Referencing

The permitting authority may allow the application to cross-reference previously issued preconstruction and part 70 permits, State or local rules and regulations, State laws, Federal rules and regulations, and other documents that affect the applicable requirements to which the source is subject, provided the referenced materials are currently applicable and available to the public. The accuracy of any description of such cross-referenced documents is subject to the certification requirements of part 70. Such documents must be made available as part of the public docket on the permit action, unless they are published and/or are readily available (e.g., regulations printed in the Code of Federal Regulations or its State equivalent). In addition, materials that are available elsewhere within the same application can be cross referenced to another section of the application.

In many cases, incorporation of prior information from previously issued permits would be useful. Examples are where a source is updating a part 70 permit by referencing the appropriate terms of a NSR permit or renewing a part 70 permit by referencing the current permit and certifying that no change in source operation or in the applicable requirements has occurred. Even where existing permit conditions are expressed in terminology other than that used in the part 70 permit, cross-referencing can still be possible. Such citations, however, would have to provide sufficient translations of terms to ensure the same effect.

As discussed previously, the permitting authority may determine that certain terms and conditions of existing NSR permits are obsolete, environmentally insignificant, or not germane with respect to their incorporation into part 70 permits. Even when a NSR permit contain such terms, citation can still be used to the extent that the NSR permit provisions appropriate for part 70 permit incorporation are clearly identified through the cross-reference. Also, the NSR permit terms not cited for part 70 incorporation are still in effect as a matter of State law unless and until expressly deleted by the permitting authority. Wherever this citation approach is used, the permitting authority should review all referenced terms to ensure they meet part 70 requirements for enforceability.

The EPA believes that one reason for the excessive length and cost of some permit applications is that sources believe they are required to paraphrase or re-state in their entirety the

provisions of the Code of Federal Regulations (CFR) or other repositories of applicable requirements. Citations can be used to streamline how applicable requirements are described in an application and will also facilitate compliance by eliminating the possibility that part 70 permit terms will conflict with underlying substantive requirements. Indeed, many States have taken a citation-based approach as a way of streamlining applications and permits. Thus, a source could cite, rather than repeat in its application, the often extensive details of a particular applicable requirement (including current NSR permit terms), provided that the requirement is readily available and its manner of application to the source is not subject to interpretation. The citation must be clear with respect to limits and other requirements that apply to each subject emissions unit or activity. For example, a storage tank subject to subpart Kb of the NSPS would cite that requirement in its application rather than re-typing the provisions of the CFR.

2. Incorporation of Part 70 Applications by Reference into Permits

The EPA discourages the incorporation of entire applications by reference into permits. The concern with incorporation of the application by reference into the permit on a wholesale basis is the confusion created as to the requirements that apply to the source and the unnecessary limits to operational flexibility that such an incorporation might cause.

If States do incorporate part 70 applications by reference in their entirety into part 70 permits, EPA will consider information in the application to be federally enforceable only to the extent it is needed to make other necessary terms and conditions enforceable from a practical standpoint. Moreover, EPA does not interpret part 70 to require permit revisions for changes in the other aspects of the application.

3. Changing Application Forms

The EPA urges States to re-examine their permit application forms in light of their experience to date and the contents of this guidance. Although the revision of an application form requires a program revision when it impacts any portion of the form which was relied upon by EPA in approving the part 70 program for the State, such a revision can, in most cases, be accomplished through an exchange of letters with the appropriate EPA Regional Office. Changes made to implement this guidance can be effected immediately with implementing documents sent to the appropriate EPA Regional Office. Similarly, a State could notify the Regional Office in writing that the State intends to

make completeness determinations based on completion of parts of the existing forms to avoid costly changes in computerized form systems that have already been developed. This is another way that a State can act quickly to streamline application requirements while minimizing its own administrative burdens.

G. Responsible Official

Part 70 provides that a "responsible official" must perform certain important functions. In general, responsible officials must certify the truth, accuracy, and completeness of all applications, forms, reports, and compliance certifications required to be submitted by the operating permits program [§ 70.5(d)]. As an example, a responsible official must certify the truth, accuracy, and completeness of all information submitted as part of a permit application [§ 70.5(a)(2)] and that the source is in compliance "with all applicable requirements" under the Act [§ 70.5(c)(9)(i)]. In addition, part 70 requires responsible officials to certify monitoring reports, which must be submitted every 6 months, and "prompt" reports of any deviations from permit requirements whenever they occur.

The definition of responsible official in § 70.2 identifies specific categories of officials that have the requisite authority to carry out the duties associated with that role. The definition provides in part that the following corporate officials may be a responsible official:

> . . . a president, secretary, treasurer, or vice president or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit . . . . [emphasis added]

Similarly, for public agencies, the definition indicates the following persons may be responsible officials:

> . . . a principal executive officer or ranking elected official. For purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency . . . . [emphasis added]

Concerns have been raised over the apparent narrowness of the current definition of responsible official. In the August 1994 Federal Register notice, EPA responded to those concerns

related to acid rain by proposing a revision to the definition of responsible official to allow a person other than the designated representative to be the responsible official for activities not related to acid rain control at affected sources [59 FR 44527].

To respond to further concerns over the definition of responsible official as it applies to partnerships formed by corporations, or partnerships, or a combination of both, EPA confirms that the same categories of officials who can act as responsible officials for corporations can also act in that capacity for partnerships where they carry out responsibilities substantially similar to those in the same categories in corporations. Partnerships that are essentially unions of corporations and/or partnerships will normally have the same management needs as corporations and so will establish a management structure with categories of officials similar to those of most corporations. In these partnerships, the persons with the knowledge and authority to assure regulatory compliance are the officials of the partnership.

Interpreting the definition of responsible official as limiting the class of persons in partnerships that may be responsible officials to general partners would frustrate the intent of the definition because it would in many instances actually result in designating a person that is not in a position to adequately fulfill the role of a responsible official. For this reason, EPA believes it is reasonable for permitting authorities, in the case of partnerships composed of corporations and/or partnerships, to allow for the same flexibility in designating a responsible official as would be the case for corporations.

H. Compliance Certification Issues

To make the required compliance certification to accompany the initial part 70 permit applications, sources are required to review current major and minor NSR permits and other permits containing Federal requirements, SIP's and other documents, and other Federal requirements in order to determine applicable requirements for emission units. The EPA and/or the State permitting authority may request additional information concerning a source's emissions as part of the part 70 application process.

Companies are not federally required to reconsider previous applicability determinations as part of their inquiry in preparing part 70 permit applications. However, EPA expects companies to rectify past noncompliance as it is discovered. Companies remain subject to enforcement actions for any past

noncompliance with requirements to obtain a permit or meet air pollution control obligations. In addition, the part 70 permit shield is not available for noncompliance with applicable requirements that occurred prior to or continues after submission of the application.

ATTACHMENT A

LIST OF ACTIVITIES THAT MAY BE TREATED AS "TRIVIAL"

The following types of activities and emissions units may be presumptively omitted from part 70 permit applications. Certain of these listed activities include qualifying statements intended to exclude many similar activities.

Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.

Air-conditioning units used for human comfort that do not have applicable requirements under title VI of the Act.

Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing/industrial or commercial process.

Non-commercial food preparation.

Consumer use of office equipment and products, not including printers or businesses primarily involved in photographic reproduction.

Janitorial services and consumer use of janitorial products.

Internal combustion engines used for landscaping purposes.

Laundry activities, except for dry-cleaning and steam boilers.

Bathroom/toilet vent emissions.

Emergency (backup) electrical generators at residential locations.

Tobacco smoking rooms and areas.

Blacksmith forges.

Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not

otherwise triggering a permit modification.[1]

Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.

Portable electrical generators that can be moved by hand from one location to another[2].

Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.

Brazing, soldering and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAP metals.[3]

Air compressors and pneumatically operated equipment, including hand tools.

Batteries and battery charging stations, except at battery manufacturing plants.

Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP.[4]

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[1]Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise required.

[2]"Moved by hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.

[3]Brazing, soldering and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are more appropriate for treatment as insignificant activities based on size or production level thresholds. Brazing, soldering, welding and cutting torches directly related to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately in this appendix.

[4]Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits

Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.

Equipment used to mix and package, soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.

Drop hammers or hydraulic presses for forging or metalworking.

Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.

Vents from continuous emissions monitors and other analyzers.

Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.

Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.

Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit VOC or HAP.

CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.

Consumer use of paper trimmers/binders.

Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.

Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants.

Laser trimmers using dust collection to prevent fugitive emissions.

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such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.

Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents.[5]

Routine calibration and maintenance of laboratory equipment or other analytical instruments.

Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.

Hydraulic and hydrostatic testing equipment.

Environmental chambers not using hazardous air pollutant (HAP) gasses.

Shock chambers.

Humidity chambers.

Solar simulators.

Fugitive emission related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.

Process water filtration systems and demineralizes.

Demineralized water tanks and demineralizer vents.

Boiler water treatment operations, not including cooling towers.

Oxygen scavenging (de-aeration) of water.

Ozone generators.

Fire suppression systems.

Emergency road flares.

Steam vents and safety relief valves.

Steam leaks.

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[5]Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.

Steam cleaning operations.

Steam sterilizers.

January 31, 1996

Dear Members of the Subcommittee on Permits, New Source Review and Toxics Integration:

As many of you know, EPA has been carefully considering how to respond to recent court decisions regarding federal enforceability of potential to emit limits. These decisions have created a need for the Agency to clarify through rulemaking what constitutes an "effective" limit on a source's potential to emit air pollutants. We wish to enlist your help in this process. The Agency recognizes the need to move expeditiously to resolve any uncertainties that may have been created regarding the applicability of many CAA requirements.

At this stage, before drafting the rulemaking proposal package, we believe it is important to solicit the views of subcommittee members on the issues and options that should be considered. Staff have drafted the attached discussion paper to aid in this process.

The paper is intended to lay out the legal and policy issues that EPA will address in response to the court decisions. The paper discusses components that may be needed for a limit to be "effective" in ensuring that a source does not emit major amounts. The Agency believes that defining what makes a limit "effective" is our central task in the wake of the National Mining Association decision. In addition, the paper describes options for addressing the issues raised.

As part of EPA's response to the National Mining Association and Chemical Manufacturers' Association decisions, and as part of its continuing effort to reconsider its regulations and streamline them where possible, the Agency now is re-examining all aspects of EPA's historical policy on potential to emit limits. Accordingly, EPA is setting forth for serious discussion and consideration an option that would recognize "effective" state-enforceable requirements as limiting a source's potential to emit. The Agency also is presenting an option that would retain federal enforceability as a necessary condition of effective limits, but streamline administrative requirements for

creating such limits to address concerns raised in the past.

The Agency plans to issue a proposed rule that includes both these options, as well as proposing ways to address other issues that influence whether limits are effective. Taking comment on these options will ensure that all stakeholders have an opportunity to express their views on implications of different options for the regulated community, states and the public. The Agency's overarching goal is to establish a system that avoids unreasonable burdens on industry or states, and ensures that major sources of air pollution comply with Clean Air Act requirements that protect public health.

Discussion of these issues is planned for the next meeting of the subcommittee, which we anticipate will be scheduled for March. We look forward to hearing your thoughts and recommendations at the meeting. If any members wish to make comments in writing, we of course will be happy to review them.

Sincerely yours,

Steven A. Herman
Assistant Administrator
for Enforcement and
Compliance Assurance

Sincerely yours,

Mary D. Nichols
Assistant Administrator
for Air and Radiation

Attachment

"Effective" Limits on Potential to Emit: Issues and Options

January 31, 1996

Note to reviewers

This paper presents a discussion of the issues that EPA intends to address in response to recent court decisions by the D.C. Circuit on the subject of potential to emit limitations. This paper is intended as the first step in the development of a formal rulemaking proposal, and is intended to list and discuss various options for regulatory amendments that are available to the EPA as a result of these court decisions.

To aid the stakeholder discussion process, the paper presents options for addressing the issues raised in the court decisions. On the issue of federal enforceability, two distinct approaches are presented with specifics on how these two approaches could be implemented.

It is hoped that the critical review of the options will help identify the most important issues to be resolved in promulgating rulemaking amendments on this issue. Additionally, EPA hopes that the review will serve to identify areas of consensus among stakeholders on the importance of issues and the feasibility of solutions, particularly the ones EPA is offering in this document. The EPA would appreciate comments from stakeholders on whether there are any additional options and approaches, beyond those addressed in this paper, that should be discussed in the rulemaking process.

Because the primary purpose of the paper is to identify options, the paper presents only a minimal discussion of the rationale for each option. A more detailed rationale will be set forth in the preamble to the proposed rule.

I. Framing the issues: The NMA and CMA decisions and their implications

Several provisions of the Clean Air Act (CAA) require that "major" sources be regulated more stringently than sources that are non-major. A "major" source is defined for purposes of section 112, title V, and the title I new source review (NSR) and prevention of significant deterioration (PSD) programs as one that either "emits or has the potential to emit" above a specified amount. Because sources that are major are generally

subject to more stringent controls, the Act creates an economic incentive for many sources to limit their potential to emit so as to avoid those requirements.[1] The integrity of these limits is important to ensure that major sources comply with Clean Air Act emission control requirements, and that the reductions in air pollution expected from these requirements are actually achieved.

EPA regulations governing NSR and PSD programs have, since the 1970s, required that limitations[2] on potential to emit (PTE) be federally enforceable before they can be recognized under the Clean Air Act. Following the 1990 amendments to the Act, EPA promulgated regulations implementing section 112 and title V of the Act, both of which mirrored the NSR/PSD regulations in this respect. On July 21, 1995, the D.C. Circuit Court of Appeals issued a decision in National Mining Association v. EPA, in which it held that EPA had not adequately justified the requirement in the section 112 regulations that limits on PTE must be federally enforceable. The Court noted that, while EPA was correct in requiring PTE limits to be "effective," it had not adequately explained how federal enforceability furthered effectiveness. On September 15, 1995, the D.C. Circuit issued a summary decision in Chemical Manufacturers Association v. EPA, vacating and remanding relevant portions of the NSR/PSD rules in light of the NMA decision.

The NMA case makes clear that EPA has the authority and the obligation to ensure that only those limits that are "effective" in limiting emissions are considered in determining PTE. However, the meaning of the term "effective," as the Court used it, is not self-evident. EPA believes that the primary purpose of this rulemaking should be to incorporate the notion of "effectiveness" into the regulatory scheme in a manner that provides clear guidance to States and the regulated community.

Tens of thousands of small emitters lack the potential to emit major amounts even in the absence of controls. It is important to note that under the Clean Air Act these sources do not need to obtain a permit or other legal limit to avoid major source requirements. Therefore, the issues discussed in this paper are not relevant to these sources.

For simplicity, this paper uses the terms "limit" and "limitation" to refer to both operational restrictions such as limits on hours of operation or throughput and to emissions control devices. Also, references to States apply equally to local air pollution control districts.

EPA's overarching goal in conducting this rulemaking is to establish a system that provides administrative flexibility and avoids unnecessary paperwork while ensuring the effectiveness of limits on PTE that are used to avoid major source requirements under the Act. This rulemaking presents an opportunity to re-examine EPA's historical policy on PTE in its totality, to carry forward those elements of it that still make sense, and to explore innovative ideas for achieving this goal.

This rulemaking proposal will include two fundamental alternatives on the issue of federal enforceability. The first approach would recognize "effective" State-enforceable requirements as limiting a source's potential to emit. The second would retain federal enforceability as a necessary condition of effective limits, but take comment on options for streamlining administrative requirements for creation of federally enforceable limits.

Although the federal enforceability issue is rightly a focus of attention, EPA believes it is critical to recognize that the "effectiveness" of limits includes considerations other than who may enforce them. The requirement that limits on PTE be enforceable by EPA and citizens under the Act has historically been just one aspect of EPA's policy on PTE.[3] Effectiveness of limits is a multi-faceted concept that can be broken down into component parts.

Three overarching considerations govern the "effectiveness" of PTE limits:

- Enforceability as a practical matter. To be "effective," limitations must be written so that it is possible to verify compliance and to document violations when enforcement action is necessary. Therefore, a key issue is how to define minimum criteria that limits must meet to be "enforceable as a practical matter." A related question is

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The term "federally enforceable" historically has been used in two ways -- first, to refer narrowly to the authority of EPA and citizens to bring suit for a violation; and, second, to refer to the collective set of elements that the Agency believed contribute to effectiveness of limits (e.g., practical enforceability of limits, approval of state programs as meeting certain criteria, notice of proposed limits to the public and EPA, enforceability in federal court by EPA and citizens). Most of these other elements are separable from enforceability by EPA and citizens, and are treated separately in this paper.

whether procedural safeguards are necessary to ensure those criteria are met.

- Compliance incentive effectiveness. EPA believes that a limit cannot be deemed effective if there is insufficient incentive to comply with it.[4] The "effectiveness" of a limit, therefore, depends in part upon the strength of the incentive it provides for a source to comply -- which in turn is tied to the probability of an enforcement action in the event of a violation. The federal enforceability issue is related to this consideration.

- State program effectiveness. Whether the first two aspects of effectiveness are achieved is influenced by the effectiveness of a State program for issuing and enforcing PTE limits. The nature of a State's program affects whether PTE limits are typically issued in a form that is practically enforceable, and whether sources have substantial incentives to comply with their limits. Relevant factors include the State's permitting requirements and program "infrastructure," including the adequacy of its enforcement authority and the level of resources available. In question here is whether a State *program* should have to meet certain criteria in order for the limits it creates to be considered effective, and whether procedures to assure *program* effectiveness should be required.

This paper is structured around the three considerations listed above. Because a key question in the litigation was whether limits need be federally enforceable to be effective, this paper begins by discussing the effectiveness of limits in encouraging sources to comply.

II. Effectiveness of limits: Strength of compliance incentive

The EPA believes that, in order to be effective, a limit must carry with it a credible expectation of enforcement. This aspect of effectiveness, referred to here as "compliance incentive effectiveness," is not revealed by an examination of

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EPA assumes that a limit on potential to emit, in order to be cognizable, must be legally enforceable by an appropriate governmental entity. Though some have made the suggestion that even voluntary limitations should be recognized, EPA does not believe that calculation of a source's potential to emit in the future should take into account pollution control measures that can be freely disregarded.

the PTE limit itself and cannot be definitively evaluated through an up-front evaluation of a State rule or program. Rather, compliance incentive effectiveness is an ongoing consideration related to the strength of a State's enforcement program.

A central question arising from the court decisions is whether sufficient compliance incentives exist if EPA and citizens cannot directly enforce PTE limits in federal court in cases where a State's enforcement program fails to secure compliance with PTE limits. The conclusion that compliance incentive effectiveness is substantially improved through the enforcement authority of EPA and citizens was historically the basis for the requirement that limits on PTE be enforceable by EPA and citizens under the Act.

In light of the NMA and CMA decisions, EPA intends as part of the PTE rulemaking to propose the two options below as ways to ensure compliance effectiveness.

Under Approach 1, *State or locally enforceable limits*, EPA would give formal recognition to effective State limits, so long as the source owner and operator assume the responsibility for demonstrating that the limits are effective and that the source is complying with these limits. Under this approach, if a source failed to comply regularly with its State permit, EPA and citizens could not sue to enforce the permit, but the source would be in violation of major source requirements of the Clean Air Act.[5]

Under Approach 2, *Streamlined federal enforceability*, the EPA would substantially reduce the administrative objections that have been raised regarding the process currently required for limits to be recognized as federally enforceable. The Agency would consider changes that would enable sources to obtain relatively quickly and easily limits that are enforceable by EPA and citizens.

Approach 1: State or locally enforceable limits

EPA will consider proposing as part of Approach 1 several additional components described later in this paper. For example, State and local programs could be allowed to issue PTE limits without the program undergoing up-front EPA review. EPA would take comment on what requirements for public participation or notice to EPA, if any, may be appropriate for limits that are not federally enforceable.

1. Description of Approach

EPA would promulgate rule amendments that would recognize limitations that are enforceable by State and local air quality agencies as adequate to restrict a source's potential to emit, as long as the limits are enforceable as a practical matter. Under this approach, EPA and citizens could bring legal action in federal court alleging violations of the major source requirements of the Act in cases when a source fails to obtain or comply with State or local permits that are actually effective in restricting the source's PTE. Under this approach neither EPA nor citizens would have authority under the Clean Air Act to enforce directly the terms of the State or local permit.

In such an enforcement action, EPA or citizens would allege that a source is in violation of the Clean Air Act in that 1) the source would be a major source in absence of any limits on the source's PTE, 2) there are no effective PTE limits in place, or the source has failed to comply with limits that would be effective if complied with, and 3) the source has failed to comply with major source requirements.

In the case of a source which has State or local PTE limits that are not federally enforceable, the regulatory amendments would allocate the burden of proof to the source owner to demonstrate that 1) the source has such State or local limits, 2) that the limits meet EPA's definition of "enforceable as a practical matter," and 3) that the source has regularly complied with the limits. Such a demonstration would constitute an affirmative defense to the allegation that the source is operating as a major source without complying with major source requirements.[6]

This allocation of responsibility is consistent with case law holding that those seeking to be excluded from a generally applicable regulatory scheme bear the burden of establishing their entitlement to the exclusion. This approach has precedent in the RCRA program; 40 C.F.R. 261.2(f) provides that a person

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In the case of a source that has PTE limits which are federally enforceable, EPA or a citizen (rather than the source) would continue to have the burden of showing that the PTE limit is not effective as a practical matter or that the source has not complied with it. In other words, there would be no change from the current system when EPA or a citizen seeks to establish that a source with federally enforceable limits has violated either the PTE limits or major source requirements.

claiming an exemption [from a RCRA permitting requirement] has the burden of proof of establishing that he is entitled to the exemption. This regulation has been upheld and interpreted to include both the burden of producing evidence and the burden of persuasion (that is, the burden of convincing the judge of all elements of the case). See, United States v. Eastern of New Jersey, 770 F. Supp. 964, 978 (D.N.J. 1991); Hazardous Waste Treatment Council v. EPA, 862 F.2d 277, 289 (D.C. Cir. 1988), cert. den. 490 U.S. 1106 (1989).

Initially, EPA believes it could implement this approach through a rule provision stating that a PTE limit that is not complied with regularly will not shield the source from enforcement for operation as a major source. This would make clear that a State PTE limit that is not regularly complied with will not be considered effective, and therefore will not be considered in calculating the source's PTE if there is an enforcement action asserting that the source is major. This is the current law today for federally enforceable permits. In United States v. Louisiana-Pacific Corp., 682 F. Supp. 1122 (D. Colo. 1987), the Court determined that, where a source had not regularly complied with its minor source permit purportedly limiting PTE, that permit would not serve as a shield to liability for violation of PSD requirements, notwithstanding the fact that the permit was enforceable by EPA.

Approach 1 envisions that source owners would bear the responsibility for having effective limits for the entire time period during which a limit was needed (e.g. after commencing construction of a source for which such limits are needed to avoid major source preconstruction requirements). If it were later discovered by EPA or citizens that effective limits have not been in place, the source owner could not avoid enforcement actions for the time period associated with construction and initial operation by adding effective limits at a later date.

EPA plans to propose this approach as one alternative for satisfying its obligation to assure compliance incentive effectiveness. Among the issues to be examined in considering this option are:

- whether the EPA should require notice from the source or the State that the source is relying on a non-federally enforceable permit (i.e. a permit not directly enforceable by EPA and citizens in federal court) as a shield from a major source requirement.

- the extent to which the EPA should limit the use of such permits to facilities or companies that are otherwise in compliance with the Act;

- whether this option should be limited to permits issued by State or local authorities with authority to enforce the SIP.

2. Illustrative examples

The following examples illustrate how this option would be implemented:

Example 1. A source has a permit that is not federally enforceable. Material usage and content limits in the permit are enforceable as a practical matter, and the source did not obtain a PSD permit. However, the source regularly violates the material usage and content requirements in its permit. The source's records show that, although there may be no clear record as to whether the source has actually emitted 250 tons per year for any 12-month period, the source has the potential to emit 250 tons per year. Because the source did not comply with its State permit, EPA or citizens could bring enforcement action against the source for failure to comply with major source requirements of the Act.

Example 2. A source has a permit that is not federally enforceable and that requires use of a carbon adsorber to control VOC emissions. A federal inspector observes that the carbon adsorber is not being operated and maintained properly, and observes breakthrough (that is, no control) during the inspection. Upon review of the permit, it contains no requirement for any recordkeeping demonstrating that the carbon bed is being regularly regenerated. In addition, the owner can provide no evidence that the carbon bed is being maintained with sufficient regularity. The control device needs to operate at 70 percent or better to achieve minor source levels. For this case, the source would be subject to an enforcement action for violations of major source requirements. Even though there is no evidence that the source is regularly violating its limit, the burden is on the source owner to demonstrate that the source has an effective set of requirements that would allow the EPA or citizens to determine whether it was in violation.

Approach 2: Streamlined federal enforceability

1. Description of approach

Under this approach, EPA would retain the current requirement that PTE limitations must be federally enforceable, but streamline administrative requirements to address concerns that have been raised.

In light of the D.C. Circuit's holding that EPA has not adequately explained the need for federal enforceability, EPA would provide an enhanced rationale for how the federal enforceability requirement could be considered a reasonable means of ensuring compliance incentive effectiveness. In addition, the following specific steps would be taken to streamline the current administrative process for achieving federal enforceability of limits:

- EPA would finalize the amendments to 40 CFR 51.161 that were proposed on August 31, 1995 in order to provide States with explicit discretion to limit up-front public review in minor NSR programs to those situations deemed to be environmentally significant. EPA believes that current minor NSR programs allowing such discretion already create limits that can be enforced by EPA and citizens in federal court. The proposed rulemaking amendments would significantly broaden States' discretion to limit public review, and would eliminate any ambiguity or uncertainty that may exist over the enforceability of these permits.

- EPA would also make clear in rulemaking language that similar discretion would exist for federally enforceable State operating permit (FESOP) programs.

- States would not be required to provide EPA with an up-front notification before permits are issued in cases where public notice is not required. Rather, States would periodically (semi-annually or annually) provide EPA with a list of PTE limits that have been issued to sources seeking to avoid federal major source requirements. EPA would make this information available to the public.

- States would still be required to submit rules and programs to EPA for approval into the SIP. Rule amendments would guarantee that State limits issued under such program would be recognized from the time the limits were established, so long as the limits were enforceable as a practical matter. This would ensure that such limits would be recognized

during the time period for which EPA approval of the State program is pending.[7]

2. Issues discussion

a. State discretion on appropriate level of public review.

Among the objections to preserving federal enforceability of limits as a requirement is a perception that federal enforceability cannot be accomplished without requiring public review of any permit approval action which is taken to create limitations on potential to emit. The EPA believes that a permit limit can be enforceable by the EPA and citizens under the Clean Air Act even if the permit was not issued with public review. The EPA believes that States, as recently proposed with respect to the minor NSR and Title V programs, can be given broad discretion with respect to judgements on which actions establishing or revising PTE limits are of sufficient environmental significance to warrant up-front public review. The EPA plans to solicit comment on whether providing such discretion in all programs utilizing PTE limits would help to alleviate the administrative objections to retaining federal enforceability.

b. Voluntary acceptance of the federal enforceability of State limits

Another alternative to eliminate possible delay to the source would be to require that PTE limits be federally enforceable in order to be federally recognizable, but to allow sources to voluntarily accept the federal enforceability of a State limit. This would eliminate the need for approval of the underlying State program. EPA plans to explore the viability of this approach in the PTE rulemaking.

Compliance incentives and citizen enforcement

EPA plans to take comment in the rulemaking on two broad issues involving compliance incentives and citizen enforcement. The first issue is whether differing opportunities for citizen enforcement create significant differences in the strength of

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Historically, EPA has required that State programs be approved through rulemaking before the PTE limits established under that program could be federally recognized as limiting PTE. This has created potential adverse consequences for a source possessing a limit that is enforceable as a practical matter when the State's program has not yet been approved by EPA.

compliance incentives for sources under Approaches 1 and 2. A second issue, which arises under both approaches, is whether citizens have adequate access to the information needed to identify violators and bring successful enforcement suits.

Regarding the first issue, EPA has generally presumed that the possibility of citizen enforcement action enhances compliance with environmental laws. As part of the rulemaking, EPA plans to consider whether the prospect of citizen suits can enhance the compliance incentive effectiveness of limits on sources' potential to emit.

The ability of citizens to enforce permit requirements under Clean Air Act section 304 tracks that of the federal government. The Agency will request comment on the extent to which the presence or absence of federal enforceability affects citizens' practical ability to bring enforcement actions against sources in violation. In reference to Approach 1, the Agency will seek information on the number of States in which standing issues could prevent citizen suits to enforce PTE limits. EPA also is interested in whether citizens would be able to effectively enforce major source requirements in most circumstances under Approach 1.

The second broad issue relates to citizens' access to information. One difference between the federal government's and citizens' opportunity to bring suit is the ability of the federal government to obtain access to facility information and records through subpoena and inspection powers. It has been suggested to EPA that the relatively few number of citizen suits under the CAA is due in part to inadequate access to records. To be able to enforce a source's limit, citizens need access to the permit and compliance records. To enforce the major source threshold, citizens also need information demonstrating that the source's potential or actual emissions exceed the major source threshold. The Agency will seek comment on the extent to which citizens currently have access to the information required, and on whether there are reasonable ways to enhance citizens' access to information under either Approach 1 or 2.

Information on a facility's potential to emit is particularly difficult for citizens to obtain. One possible way to address this problem would be to require a source or the State to provide notice to EPA when the source takes State or local limits on its PTE. Such notice might include a statement regarding the assumptions used in calculating the uncontrolled PTE, absent the State or locally required limits or control equipment. Citizens could then access such information through EPA. The Agency also will seek comment on providing safeguards

for claimed "proprietary business information" in releasing the notification to the public.

III. Practical enforceability of limits

Whether a PTE limit is "effective" depends in part on whether that limit is enforceable as a practical matter. EPA therefore believes that questions concerning enforceability as a practical matter will be among the most important addressed in the PTE rulemaking.

Definition of "enforceable as a practical matter"

Under either Approach 1 or Approach 2, the EPA would consider amending current rules to require that emission limitations used to limit a source's potential to emit be "enforceable as a practical matter." The rule would require limitations to:

- be permanent;
- contain a legal obligation for the source to adhere to the terms and conditions;
- not allow a relaxation of a SIP requirement;
- be technically accurate and quantifiable;
- identify an averaging time that allows at least monthly checks on compliance (that is, monthly or shorter averages are encouraged; where this is unreasonable, longer averages would be required to be accounted for on a rolling monthly basis); and
- require a level of recordkeeping, reporting, and monitoring sufficient to demonstrate compliance with the limit.

In addition to these general criteria for ensuring that limits are verifiable and otherwise enforceable, the EPA intends to request comment on:

- Whether EPA regulations should more specifically describe the minimum elements of practicable enforceability. For example, should the regulations include language on the form in which limits must be expressed to be effective -- more specifically, principles from section III of EPA's June 13, 1989 guidance on limiting potential to emit in new source permitting (e.g., restrictions on use of emission limits,

requirement that limits include operating parameters and underlying assumptions in cases where add-on controls operating at specified efficiency are required, independent enforceability of production and operational limits)?

- Whether EPA regulations should provide examples of terms that would be inappropriate in a PTE limit. For instance, the regulation might list as examples long-term (e.g. annual) emission rate limitations, limits that cannot be directly correlated with the relevant regulatory threshold (e.g. opacity limits to a PM threshold), or limits based on erroneous or unsupported generic emission factors.

EPA's initial thinking is that the rule would not provide specific requirements regarding the "appropriate level" of recordkeeping, reporting and monitoring, nor would the regulatory text list examples of situations that are prohibited. EPA notes that guidance issued on June 13, 1989, regarding practicable enforceability is still the most comprehensive statement from EPA on this subject. EPA would, within resource limitations, and with the help of State and local agencies, work to develop additional guidance where needed. In this regard the EPA would solicit comments on examples that could be provided in guidance or in the preamble to the final rule amendments.

IV. State program effectiveness

As stated above, the effectiveness of a State program affects both whether PTE limits are typically issued in a form that is practicably enforceable, and whether sources have substantial incentives to comply with their limits. Therefore, an issue to be addressed in the rulemaking is whether EPA should specify minimum effectiveness criteria that State programs must satisfy for the limits they create to be recognized as limiting PTE -- and if so, whether there should be a mechanism for EPA evaluation of these programs.

The Agency historically has required that State programs meet minimum criteria -- for legal authority, resources, and substantive and procedural aspects of permitting programs -- in order for the limits they create to be recognized as limiting PTE.

Some considerations influencing state program effectiveness are susceptible to evaluation before (or at the time) the PTE limits created by the program are relied upon by a source. These "front-end" considerations include questions of State air program "infrastructure," such as whether the program possesses adequate

resources and whether there exists adequate legal authority for enforcement. In addition, there are considerations related to the adequacy of each program or rule creating PTE limits -- specifically, rules governing the substantive and procedural aspects of permit issuance for individual sources, and "prohibitory" or "exclusionary" rules designed to limit the PTE of sources in particular categories.

Other considerations can only be evaluated on an ongoing basis -- notably, the effectiveness of State enforcement efforts in promoting compliance. This "back-end" aspect of State program effectiveness is discussed separately below.

Front-end considerations

1. Description of approaches

Under Approach 1, EPA would not require up-front review or approval of State or local rules or programs for creating PTE limits. EPA would presume that these programs possess an adequate infrastructure, adequate legal authority for enforcement, and adequate permitting procedures. EPA would take comment on whether it should maintain authority to deem a State program generally "ineffective" at any time if clearly identifiable deficiencies in one or more of these State program elements were present, based on criteria established by EPA. Such a remedy could be appropriate, for example, if a program issued significant numbers of permits that are not enforceable as a practical matter. The result of deeming a program ineffective could be to render ineffective all limits created by that program, or to render ineffective any limits issued after the date of the ineffectiveness finding. EPA would take comment on this issue and on procedures for determining that a State program is ineffective.

Under Approach 2, EPA would continue to evaluate State rules and programs that create PTE limits, with the streamlining changes described under the heading "Approach 2: Streamlined Federal Enforceability."

Under both Approach 1 and Approach 2, the EPA would require that an "effective limit" must be obtained from the agency generally responsible for air quality permits. Limitations from other State or local authorities could not be taken into account.

2. Criteria for State program effectiveness

a. Overview

EPA initially believes the front-end State program effectiveness issues to be addressed in the PTE rulemaking are the following:

- Should a State have devoted a certain level of resources before its program can be considered effective and therefore able to create PTE limits? EPA plans to solicit comment on this issue. Though it may be possible to determine on an audit basis whether a State's resources are adequate, the level of resources needed will be particular to a State's strategy for addressing PTE, and so cannot be specified in advance by EPA.

- Should a State be required to have adequate legal authority for enforcement before its PTE limit program can be considered effective?

- Should the State's permitting regulations be required to meet minimum criteria in order to be able to create PTE limits? In its June 28, 1989 Federal Register notice on PTE, EPA required State permitting programs to meet certain criteria in order to yield federally recognizable PTE limits. Relevant to this discussion, the programs could not allow for the relaxation of a limit in the SIP, and the program had ta provide for public and EPA notice of permit issuance. (See further discussion below.)

- Are there other criteria that should be met for a State program to be able to create PTE limits? EPA plans to solicit comment on this question.

b. Procedures ta ensure practical enforceability of limits

EPA will consider in the rulemaking whether procedural requirements are needed to help ensure that the limits issued by a State program are enforceable as a practical matter. If so, such procedures could be required either as necessary elements of an effective State program, or -- if there is na up-front review of State programs under Approach 1 -- as necessary conditions of an effective limit. The procedural issues that EPA is currently aware of concern notice and an opportunity for review by the public and EPA.

This paper already has described the way that EPA would address the public participation and EPA notice issues under its streamlined federal enforceability approach (see above). However, these issues arise whether or not PTE limits are required ta be federally enforceable. EPA plans to take comment and consider the appropriate way ta address these issues under

Approach 1. One option identified by EPA is that sources receiving State-enforceable PTE permit limitations that are not federally enforceable, or the State issuing these limits, could be required to notify the EPA within 3-6 months of the permit, and to provide the EPA with a copy of the permit. EPA notification and approval would not be required before the State could issue the permit or before that permit becomes effective. The EPA would provide the public access to the permits.

In connection with public participation and EPA notice, EPA plans to take comment on:

- whether there are types of permits for which a minimum level of public participation in establishment of PTE limits should be required, in view of EPA's August 1995 proposal regarding public comment in minor new source review programs.

- whether notice and an opportunity for EPA review carries with it additional certainty for the source that its limit will not later be found ineffective.

- whether notice to EPA of draft permits should be required, or whether EPA should instead rely on a system of auditing permits already issued.

Questions of public participation and EPA notice also are relevant to issuance of "prohibitory" or "exclusionary" rules designed ta exclude certain qualifying sources from major source requirements. As these generic rules limit the PTE for potentially large numbers of sources, public participation and prior notice to EPA of the proposed State or local rule may be appropriate whether or not limits are required to be federally enforceable. EPA will seek information on the extent ta which notice ta the public is already part of State rulemaking procedures. The Agency also will seek comment on whether notice to EPA of the draft or proposed rule would be reasonable and add certainty to sources' reliance on generic rules.

3. Possible mechanisms for State program evaluation

If there are some substantive criteria for an effective State program, the rulemaking must also address whether there will be a mechanism for evaluation of the State program infrastructure. EPA initially sees three options.

1. EPA articulates minimum effectiveness criteria for State programs, but does not require prior approval of a State program before limits established by the State can be federally

recognizable. Instead, EPA audits State programs and retains the ability to deem a State program "ineffective" at any time.

2. EPA establishes minimum effectiveness criteria for State programs, and EPA establishes by rule a subsequent informal review and approval process (e.g., an exchange of letters between EPA and the State). Under this option, the process would be established as part of the original rule, but no additional case-by-case rulemaking would be needed for approval of individual State programs. State programs would be deemed effective upon approval as being capable of creating PTE limits.

3. EPA establishes minimum effectiveness criteria for State programs, and EPA formally reviews and approves programs through rulemaking. State programs would be deemed effective upon completion of the rulemaking.

EPA notes that, currently, many State PTE programs have already received approval through rulemaking. EPA expects that there would be na need ta re-evaluate these programs.

Back-end considerations: Effectiveness of State enforcement

The twa approaches described above for ensuring compliance incentive effectiveness -- "State and locally enforceable limits", and "streamlined federal enforceability" -- focus on sanctions available against a source directly when the source fails to comply with its PTE limit. EPA will alsa explore whether it should retain the ability to deem a State program "ineffective" where non-compliance with PTE limits is common due ta the lack of a credible State enforcement program. This option has historically been available to EPA because approval of PTE programs inta the SIP allows EPA to withdraw that approval where appropriate, and would be retained under Approach 2.

Under Approach 1, EPA will take comment on whether it should establish a federal remedy for program-wide failure to assure effectiveness. Preliminarily, EPA believes such a remedy would involve deeming a program "ineffective" such that any limit established under that program would no longer be recognized as limiting a source's PTE. EPA will solicit comment on the appropriate procedures for deeming a State program ineffective from an enforcement standpoint.

V. Transition issues

Description of approach

In the interim, pending action ta adopt Approach 1 or Approach 2 (or some other approach), EPA would plan ta extend the transition period for section 112 and title V, contained in EPA's policy memorandum dated January 25, 1995, for an additional time period that extends from January 1997 ta allow for promulgation of a final PTE rule.

Discussion

EPA recognizes that certain approaches discussed in this paper might establish new requirements or procedures for ensuring the effectiveness of PTE limits. EPA believes that, given the general streamlining nature of the options discussed in this paper, the potential for disruption from the current state of affairs is small. However, approaches set forth in this discussion paper differ from those contemplated in EPA's January 25, 1995, memorandum, "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act," and other agency guidance on potential to emit. In the PTE rulemaking, EPA plans to request comment on any transitional issues that may be raised by past reliance on guidance contained in the January 25, 1995, memorandum or other guidance that differs substantively from the new direction that EPA will be taking in response to decisions of the D.C. Circuit. EPA will expressly consider whether any temporary measures will be needed to ensure a smooth transition ta the approach finally adopted in the PTE rulemaking.

Another issue related to potential to emit is whether EPA should adopt rulemaking amendments that would provide an exemption for sources with actual emissions significantly less than major source thresholds. In a guidance memorandum dated November 14, 1995 entitled "Calculating Potential ta Emit (PTE) and Other Guidance for Grain Handling Facilities," the EPA included a commitment ta promulgate rulemaking amendments that would extend permanent relief ta low-emitting sources, excluding such sources from being classified as "major sources" for purposes of title V permitting. (The exact cutoff for what constitutes a low-emitting source would be determined in the rulemaking process.) As discussed above, since this November memorandum was issued the EPA has developed an option which would delete the requirement for PTE limits ta be federally enforceable and allow reliance on limits that are State-enforceable. The EPA believes that allowance for use of State-enforceable limits (as well as other streamlining options in this paper) should

significantly reduce the burden ta a source in obtaining a PTE limit, and may provide an effective solution for the issues raised at that time. Accordingly, before proceeding with further rulemaking concerning such an approach, the EPA seeks comment from stakeholders on whether a small source exemption would still be needed if the Agency adopted the options being put forward today.

March 5, 1996

MEMORANDUM

SUBJECT: White Paper Number 2 for Improved Implementation of The Part 70 Operating Permits Program

FROM: Lydia N. Wegman, Deputy Director /s/
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Office of Ecosystem Protection, Region I
Director, Environmental Planning and Protection Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air, Pesticides and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA and TSCA Division, Region VII
Assistant Regional Administrator, Office of Pollution Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X

Please find attached White Paper Number 2 for improved implementation of part 70 operating permits programs. This guidance is intended to enable State and local agencies to take further steps to reduce the complexity and preparation costs of part 70 permit applications and of the part 70 permits themselves. It is intended to supplement, not obviate, the guidance provided in EPA's "White Paper for Streamlined Development of part 70 Permit Applications" (July 10, 1995). This guidance is consistent with and furthers the goals of the Presidential initiatives to streamline and reinvent government.

The attached guidance is divided into five sections as follows:

II. A. Streamlining Multiple Applicable Requirements On The Same Emissions Unit(s).

II. B. Development Of Applications And Permits For Outdated SIP Requirements.

II. C. Treatment Of Insignificant Emissions Units.

II. D. Use Of Major Source And Applicable Requirement Stipulation.

II. E. Referencing Of Existing Information In Part 70 Permit Applications And Permits.

Streamlining will lead to substantial reductions in permitting burdens and improved part 70 implementation by allowing for the first time multiple applicable emissions limits and work practices expressed in different forms and averaging times to be reduced to a single set of requirements (which can be an alternative to all those requirements being subsumed). It will also allow various monitoring, recordkeeping, and reporting requirements that are not critical to assuring compliance with the streamlined (most stringent) limit to be subsumed in the permit. Any such streamlining must provide that compliance with the streamlined limit would assure compliance with all applicable requirements. In addition, substantial reductions in burden are expected to result from the reduced confusion and cost where locally adopted rules differ from the EPA-approved State implementation plan, the streamlined treatment of insignificant emissions units, the use of stipulations by sources as to which regulations apply, and the cross referencing rather than repetition of certain existing information.

There is an immediate need for the implementation of this guidance. A large number of sources have filed complete part 70 applications, and increasing numbers of these submittals are being processed for permit issuance. I strongly encourage you to work with your States to effect near-term use of this guidance.

Substantial contributions to this White Paper have come from the California Title V Implementation Working Group. I want to thank you and your staff for your support and Region IX in particular for their leadership and considerable efforts in developing and completing this paper. I invite your suggestions on what additional guidance is needed to improve further the initial implementation of title V. If you should have any questions regarding the attached guidance, please contact Michael Trutna at (919) 541-5345, Ginger Vagenas of Region IX at (415) 744-1252, or Roger Powell at (919) 541-5331.

Attachment

cc: M. Trutna (MD-12)

G. Vagenas (Region IX)
R. Powell (MD-12)
A. Schwartz (2344)

WHITE PAPER NUMBER 2 FOR IMPROVED IMPLEMENTATION OF THE PART 70 OPERATING PERMITS PROGRAM

U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF AIR QUALITY PLANNING AND STANDARDS

March 5, 1996

Contacts: Michael A. Trutna (919) 541-5345
Ginger Vagenas (415) 744-1252
Roger Powell (919) 541-5331

WHITE PAPER NUMBER 2 FOR IMPROVED IMPLEMENTATION OF THE PART 70 OPERATING PERMITS PROGRAM

March 5, 1996

I. OVERVIEW.

This guidance is intended to enable State and local agencies to take further steps to reduce the complexity and preparation costs of part 70 permit applications and of the part 70 permits themselves and to remove unintended barriers and administrative costs. It is also intended to build on and expand the guidance provided in the Environmental Protection Agency's (EPA) "White Paper for Streamlined Development of Part 70 Permit Applications" (July 10, 1995). White Paper Number 2 supplements, not obviates, the first White Paper. Both papers should be consulted for guidance in improving the implementation of title V of the Clean Air Act (Act) (i.e., part 70 operating permits programs). In particular, White Paper Number 2 is designed to simplify the treatment of overlapping regulatory requirements and insignificant emissions units and to clarify the use of citations and incorporation by reference in the part 70 permitting process. This effort is consistent with and furthers the goals of the Presidential initiatives to streamline and reinvent government.

Substantial contributions to this White Paper have come from the California Title V Implementation Working Group (Working Group). The California Air Resources Board and several California air districts and industries which (together with EPA) make up the Working Group have decades of experience with operating permits. These operating permits programs are generally just one component of air programs that, in many districts, also include local emissions standards (often with associated recordkeeping and reporting requirements), monitoring requirements, inspections, source testing, and new source review (NSR). The EPA has found the insights and recommendations of the Working Group extremely useful in integrating these various requirements using the part 70 permitting process. While much of the guidance contained herein addresses situations arising in California, it is available for use nationwide.

This guidance is divided into five sections and two attachments which are generally summarized as follows (the reader is, however, referred to the applicable main sections of the guidance for more detailed information):

Section II. A. Streamlining Multiple Applicable Requirements On The Same Emissions Unit(s).

The EPA and States have developed different and often

overlapping applicable requirements governing the same emissions units to serve the purposes of different air programs. As a result, emissions units at a stationary source may be subject to several parallel sets of requirements. This can result in some of the requirements being redundant and unnecessary as a practical matter, even though the requirements still legally apply to the source. In cases where compliance with a single set of requirements effectively assures compliance with all requirements, compliance with all elements of each of the overlapping requirements may be unnecessary and could needlessly consume resources. For example, a source could be subject to overlapping standards that result in two or more different emissions limits for the same pollutant and two or more source monitoring requirements for instrumentation, recordkeeping, and reporting.

Today's guidance describes how a source may propose streamlining to distill or "streamline" multiple overlapping requirements into one set that will assure compliance with all requirements. According to the guidance, multiple emissions limits may be streamlined into one limit if that limit is at least as stringent as the most stringent limit. (Limitations that apply to the streamlining of acid rain requirements are described in the main section of this guidance.) If no one requirement is unambiguously more stringent than the others, the applicant may synthesize the conditions of all the applicable requirements into a single new permit term that will assure compliance with all requirements. The streamlined monitoring, recordkeeping, and reporting requirements would generally be those associated with the most stringent emissions limit, providing they would assure compliance to the same extent as any subsumed monitoring. Thus, monitoring, recordkeeping, or reporting to determine compliance with subsumed limits would not be required where the source implements the streamlined approach.

It is important to emphasize that while streamlining may be initiated by either the applicant or the permitting authority, it can only be implemented where the permit applicant consents to its use.

Section II. B. Development Of Applications And Permits For Outdated SIP Requirements.

Historically, long periods of time have been required to review and approve (or disapprove) SIP revisions. The EPA has undertaken a number of reforms to its SIP approval process and is continuing to make significant progress in

reducing the amount of time required for taking action on SIP revisions. Despite the progress we have made to date, there are many local rules now pending EPA review and approval for inclusion in the SIP. The gap between the approved SIP and the State rules is of concern because States and local agencies enforce their current rules (which are usually more stringent than the approved SIP rules) and often, as a practical matter, no longer enforce the superseded and outdated rules in the SIP. On the other hand, EPA only recognizes and can only enforce the SIP-approved rules. This situation can cause confusion and uncertainty because some sources are effectively subject to two different versions of the same rules. Part 70's application, certification, and permit content requirements highlight this longstanding concern.

The most problematic situation arising from the gap between the approved SIP and the State rules is where a technology-forcing rule that has been approved into the SIP is found by the State to be impossible to meet. Under these circumstances, the State would generally adopt a relaxation of this rule and submit it to EPA as a SIP revision. Until EPA is able to take action on the submitted relaxation, sources remain subject to a rule that is impossible to meet.

This section of the guidance largely addresses the problem by authorizing permitting authorities and their sources to base permit applications on State and local rules that have been submitted for SIP approval, rather than on the potentially obsolete approved SIP provisions that they would replace. Such reliance on pending State and local rules is proper when the permitting authority has concluded that the pending rule will probably be approved, or when the source believes it can show that the pending rule is more stringent than the rule it would replace. However, if the pending rule is not more stringent than the rule it would replace, the permit cannot be issued until the pending rule is approved.

Section II. C. Treatment Of Insignificant Emissions Units.

This section provides for the streamlined treatment of generally applicable requirements that apply to "insignificant" emissions units (IEU's). It is intended to address current concerns that resources will be unnecessarily consumed by matters of trivial environmental importance.

The guidance clarifies that the permitting authority has broad discretion to tailor the permit application and

permit for small equipment and activities as long as compliance with Federal requirements is assured. For both the permit application and the permit, information on IEU's may be generically grouped and listed without emissions estimates, unless emissions estimates are needed for another purpose such as determining the amount of permit fees that are calculated using total source emissions. This approach would utilize standard permit conditions with minimal or no reference to any specific emissions unit or activity, provided that the scope of the requirement and its enforcement are clear.

The EPA also believes that for IEU's, a responsible official's initial compliance certification may be based on available information and the latest cycle of required information.

The guidance further provides that the permitting authority can use broad discretion in determining the nature of any required periodic monitoring. The EPA's policy on IEU's is based on the belief that these emissions points are typically associated with inconsequential environmental impacts.

Section II. D. Use Of Major Source And Applicable Requirement Stipulation.

There have been concerns expressed that extensive new emissions data would be needed to verify major source status or the applicability of Federal requirements. White Paper Number 2 clarifies that for applicability purposes, a source familiar to the permitting authority may simply stipulate in its application that it is major or that Federal requirements apply as specified in the application. The paper clarifies that there is no need to prepare and submit extensive information about the source that "proves" it is subject to any requirements that it stipulates are applicable. This does not affect the requirement to provide information that is otherwise required by part 70.

Section II. E. Referencing Of Existing Information In Part 70 Permit Applications And Permits.

Concerns have been raised that a source must re-prepare and resubmit information that is readily available, or that the permitting authority already has, to complete part 70 permit applications. In addition, similar concerns have been voiced regarding the large and potentially unnecessary burden of developing permits which repeat rather than reference certain types of regulatory requirements that

apply to the source (e.g., monitoring and testing protocols). The guidance clarifies that, in general, the permitting authority may allow information to be cited or cross-referenced in both permits and applications if the information is current and readily available to the permitting agency and to the public. The citations and references must be clear and unambiguous and be enforceable from a practical standpoint. After permits specify which emissions limits apply to identified emissions units, cross-referencing can be authorized for other requirements (e.g., monitoring, recordkeeping, and reporting).

Attachment A provides guidance on using the part 70 permit process to establish alternative test methods, while Attachment B provides example SIP language that could be used by both part 70 and non-part 70 sources to establish alternative requirements without the need for a prior source-specific SIP revision. This guidance should be particularly useful to those seeking greater certainty or to establish alternative test methods to those now approved by EPA. **[Note that Sections III. and beyond in Attachment B are currently in draft form.]**

Streamlining will lead to substantial reductions in permitting burdens by allowing for the first time multiple applicable emissions limits and work practices expressed in different forms and averaging times to be reduced to a single set of requirements. It will also lower current burden levels by allowing various monitoring, recordkeeping, and reporting requirements that are not critical to assuring compliance with the streamlined (most stringent) limit to be subsumed in the permit. In addition, substantial reductions in burden are expected to result from the reduced confusion and cost where locally adopted rules differ from the EPA-approved SIP, the streamlined treatment of insignificant emissions units, and the use of stipulations and the cross-referencing rather than repetition of certain existing information in part 70 applications and permits.

The EPA believes that the guidance contained herein may be implemented by permitting authorities and sources without revisions to part 70 programs, unless a provision is specifically prohibited by State regulations. In some situations, EPA will be proceeding in parallel to issue clarifying rules. The EPA strongly encourages States to allow sources to take advantage of the streamlining opportunities provided in this guidance. The Agency also suggests the permitting authority develop information about permits issued with successful streamlining and make it available to other similar sources to help avoid repetitive costs.

Sources are advised to consult with their permitting authority to understand how the policies of this White Paper will be implemented. In several situations (particularly those where sources have already filed complete applications), permitting authorities may choose to propose streamlining options and, if mutually agreeable, work with the source to support a draft permit containing a streamlined limit. Where EPA is the permitting authority pursuant to part 71 regulations, the Agency will implement both White Papers to the extent possible and promote similar implementation where EPA delegates responsibility for the part 71 program to a State.

The policies set out in this paper are intended solely as guidance, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party.

II. ADDITIONAL GUIDANCE ON STREAMLINED DEVELOPMENT OF PART 70 PERMITS AND APPLICATIONS.

A. Streamlining Multiple Applicable Requirements[1] On The Same Emissions Unit(s).[2]

1. Issue.

Can multiple redundant or conflicting requirements (emissions limits, monitoring, recordkeeping, reporting requirements) on the same emissions unit(s) be streamlined into a

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[1]Title IV applicable requirements are an exception to this general rule. As set out in § 72.70(b), to the extent that any requirements of part 72 and part 78 are inconsistent with the requirements of part 70, part 72 and part 78 will take precedence and will govern the issuance, denial, revision, reopening, renewal, and appeal of the acid rain portion of an operating permit. The subsequent descriptions of streamlining therefore apply to requirements under parts 72 and 78 only to the extent that such requirements are, at the option of the applicant, used as streamlining requirements because they are the most stringent applicable requirements.

[2]Emissions unit(s) means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant (as defined in section 70.2) or any pollutant listed under section 112(b) of the Act. It is used in this paper to include specifically a grouping of emissions units at a stationary source that shares the same applicable requirement and compliance demonstration method for a given pollutant.

single set of understandable and enforceable permit conditions? May an applicant propose to minimize or consolidate applicable requirements? May a permitting authority develop such a proposal? How would a permit application with a streamlining proposal satisfy compliance certification requirements?

2. Guidance.

A source, at its option, may propose in its application to streamline multiple applicable requirements into a single set of permit terms and conditions[3]. The overall objective would be to determine the set of permit terms and conditions that will assure compliance with all applicable requirements for an emissions point or group of emissions points so as to eliminate redundant or conflicting requirements. Otherwise applicable requirements that are subsumed in the streamlined requirements could then be identified in a permit shield. The process would be carried out in conjunction with the submittal and review of a part 70 permit application, as an addendum to an application, or as an application for a significant revision to the part 70 permit (unless EPA in its revisions to part 70 authorizes permitting authorities to use a less extensive permit revision process). The EPA plans to revise part 70 to provide that the compliance certification required with initial application submittals may be based on the proposed streamlined applicable requirement where there is sufficient source compliance information on which to base such a certification.

The permitting authority, at its option, may evaluate multiple applicable requirements for a source category and predetermine an acceptable streamlining approach. Such evaluations should be made readily available to applicants. It is up to the applicant, however, to request in its application that such streamlined requirements be contained in the part 70 permit. Where streamlining would be of mutual interest, the permitting authority and the source could work together during the permit development stage to establish a basis for a streamlined limit prior to the issuance of a draft permit. This

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[3]The EPA recognizes that the described streamlining process may not be allowed by all State regulations or be warranted or desired for all applicable requirements. Similarly, partial streamlining (i.e., the streamlining of some, but not all, applicable requirements that apply to the same emissions units) may be most cost effective where difficult comparisons or correlations are needed for streamlining the other remaining applicable requirements. In addition, there is no barrier to more extensive
streamlining occurring in the future.

cooperative activity must result in a record consistent with this guidance which supports the draft permit containing the streamlined requirement. The approach might be particularly useful where a source has already submitted a complete part 70 permit application and the permitting authority does not want to require the source to submit a formal amendment to its application. Any streamlining demonstration must be promptly submitted to EPA upon its availability and in advance of draft permit issuance unless EPA has previously agreed with the permitting authority not to require it (e.g., the proposed streamlining is of a simple and/or familiar type with no new concerns).

In addition, general permits could be useful to allow the transfer of streamlined requirements from the first source to be covered by them to other similar sources or emissions units. The information development and review conducted as part of streamlining for an individual source can be used by the permitting authority to generate a general permit for similar sources or portions of sources. If a general permit were used, EPA and public review beyond that needed to issue the general permit would not be necessary when sources subsequently applied for the streamlined permit conditions established under the general permit. Even where a general permit is not issued, the availability of information obtained from the streamlining of one source may be useful as a model for future streamlining actions involving other similar sources.

Streamlined permit terms should be covered by a permit shield. The permit shield will result in an essential degree of certainty by providing that when the source complies with the streamlined requirement, the source will be considered to be in compliance with all of the applicable requirements subsumed under the streamlined requirement. Where the program does not now provide for a permit shield, the permit containing streamlined requirements should clarify this understanding (See section II.A.3. discussion). Permitting authorities without provisions for permit shields are encouraged to add a permit shield provision at the first opportunity, if they wish to realize fully the benefits of streamlining.

Sources that opt for the streamlining of applicable requirements must demonstrate the adequacy of their proposed streamlined requirements. The following principles should govern their streamlining demonstrations:

a. The most stringent of multiple applicable emissions limitations for a specific regulated air pollutant on a particular emissions unit must be determined taking into

account[4,5]:

- o Emissions limitation formats (emissions limits in different forms must be converted to a common format and/or units of measure or a correlation established among different formats prior to comparisons);
- o Effective dates of compliance (to the extent different);
- o Transfer or collection efficiencies (to the extent relevant);
- o Averaging times[6]; and
- o Test methods prescribed in the applicable requirements[7].

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[4]Applicable requirements mean those requirements recognized by EPA, as defined in § 70.2. State and local permitting authorities may modify, eliminate, or streamline "State-only" requirements based on existing State or local law and procedures.

[5]Sources may, in the interest of greater uniformity, opt to expand the scope of an applicable requirement to more emissions units so that the same requirements would apply over a larger section of the plant or its entirety, provided compliance with all applicable requirements is assured. Though a permit may through streamlining expand the scope of applicable requirements to include new emissions units, it may not change the basis on which compliance is determined (e.g., emissions unit by emissions unit, if that is the intent of the applicable requirement).

[6]While the streamlining of requirements with varying averaging times is viable under this policy, in no event can requirements which are specifically designed to address a particular health concern (including those with short term averaging times) be subsumed into a requirement which is any less protective.

[7]The predominant case is expected to involve test methods which have been EPA approved either as part of the SIP or as part of a Federal section 111 or 112 standard. If a permitting authority is seeking to base a streamlined limit on an alternative or new test method relative to the ones already approved by EPA for the SIP or a section 111, or section 112 standard, some additional steps are needed to complete the proposed streamlining. As described in more detail in Attachment A, permitting authorities may only implement streamlining which

Limitations for specific pollutants can be subsumed by limitations on classes of pollutants providing the applicant can show that the streamlined limit will regulate the same set of pollutants to the same extent as the underlying applicable requirements. For example, a volatile organic compound (VOC) limitation could effectively subsume an organic hazardous air pollutant (HAP) limitation for a constituent such as hexane, provided the VOC limit is at least as stringent as the hexane limitation. Where a single VOC limit subsumes multiple HAP limits, the permit must be written to assure that each of the subsumed limits will not be exceeded. However, a limit for a single or limited number of compounds cannot be used to subsume a limit for a broader class (e.g., a hexane limit for a VOC limit) because this would effectively deregulate any of the class that are not covered by the more limited group.

b. Work practice requirements must be treated as follows:

o Supporting An Emissions Limit. A work practice requirement directly supporting an emissions limit (i.e., applying to the same emissions point(s) covered by the emissions limit) is considered inseparable from the emissions limit for the purposes of streamlining emissions limits. The proposed streamlined emissions limit must include its directly supporting work practices, but need not include any work practice standards that are associated with and directly support the subsumed limit(s);

o Not Supporting An Emissions Limit. Similar work practice requirements which apply to the same emissions or emissions point but which do not directly support an emissions limit may be streamlined (e.g., different leak detection and repair (LDAR[8]) programs). The

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involves alternative or new test methods within the flexibility granted by the SIP and any delegation of authority from EPA (where section 111/112 standards are involved). With respect to SIP requirements, the ability for a permitting authority to authorize use of a different test method depends on the governing language contained in the SIP. Attachment B contains example SIP language which provides a mechanism that can establish an alternative applicable requirement in such cases without the need for source specific SIP revisions.

[8]For LDAR programs, stringency comparisons likely will be based on the aggregate requirements of each LDAR program (screening levels, frequency of inspection, repair periods, etc,) and the resultant overall actual emissions reduction expected

streamlined work practice requirement may be composed of provisions/elements (e.g., frequency of inspection, recordkeeping) from one or more of the similar work practice requirements, provided that the resulting composite work practice requirement has the same base elements/provisions as the subsumed work practice requirements (e.g. has a frequency of inspection or has recordkeeping if the subsumed work practice requirements have these elements/provisions).

Multiple work practice requirements which apply to different emissions or emissions points cannot be streamlined.

c. Monitoring, reporting, and recordkeeping requirements should not be used to determine the relative stringency of the applicable requirements to which they are applicable.

d. Where the preceding guidance does not allow sufficient streamlining or where it is difficult to determine a single most stringent applicable emissions limit by comparing all the applicable emissions limits with each other, sources may perform any or all the following activities to justify additional or different streamlining:

o Construct an alternative or hybrid emissions limit[9]

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from the affected equipment. In cases where a convincing demonstration cannot be made based on existing information or the regulations themselves have not clearly defined the expected emissions reduction, verifying test data may be required. Alternatively, the applicant, the permitting authority, and EPA can work together to devise a method consistent with the principles of EPA's "Protocol For Equipment Leak Emissions Estimation" (EPA-453/R-95-017, November 1995) for determining relative stringency. Where a demonstration of the relative stringency of LDAR programs as applied to the affected equipment is not feasible, sources may modify elements of a particular LDAR program to produce a program that clearly (i.e., without further analysis) assures compliance with the other applicable LDAR programs.

[9]Title V allows for the establishment of a streamlined requirement, provided that it assures compliance with all applicable requirements it subsumes. However, EPA recognizes that construction of such hybrid or alternative limits can be more complicated than the situation where the streamlined limit is one of the applicable emissions limits. Accordingly, sources and States may need more time to agree on acceptable

that is at least as stringent as any applicable requirement;

o Use a previously "State-only" requirement as the streamlined requirement when it is at least as stringent as any applicable Federal requirement it would subsume (this requirement would then become a federally-enforceable condition in the part 70 permit);

o Use a more accurate and precise test method than the one applicable (see footnote number 7) to eliminate doubt in the stringency determination; or

o Conduct detailed correlations to prove the relative stringency of each applicable requirement.

e. The monitoring, recordkeeping, and reporting requirements associated with the most stringent emissions requirement are presumed appropriate for use with the streamlined emissions limit, unless reliance on that monitoring would diminish the ability to assure compliance with the streamlined requirements.[10] To evaluate this presumption, compare whether the monitoring proposed would assure compliance with the streamlined limit to the same extent as would the monitoring applicable to each subsumed limit. If not, and if the monitoring associated with the subsumed limit is also relevant to and technically feasible for the streamlined limit, then monitoring associated with a subsumed limit (or other qualifying monitoring[11]) would be included in the permit.[12] The recordkeeping and reporting

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demonstrations and may wish to defer such streamlining until after issuance of the initial part 70 permit.

[10]Quality assurance requirements pertaining to continuous monitoring systems should be evaluated using the same approach.

[11]The applicant may propose alternative monitoring of equal rigor. Permitting authorities may only implement streamlining which involves alternative or new monitoring methods within the flexibility granted by the SIP and any delegation of authority from
EPA (where section 111/112 standards are involved).

[12]Permitting authorities and sources should presume that existing monitoring equipment [such as continuous emissions monitors (CEMs)] required and/or currently employed at the source should be retained. A permitting authority or applicant would have the opportunity to demonstrate that retention of such

associated with the selected monitoring approach may be presumed to be appropriate for use with the streamlined limit[13,14,15].

f. Permitting authorities must include citations to any subsumed requirements in the permit's specification of the origin and authority of permit conditions. In addition, the part 70 permit must include any additional terms and conditions as necessary to assure compliance with the streamlined requirement. In all instances, the proposed permit terms and conditions must be enforceable as a practical matter.

3. Process.

Streamlining may be accomplished through an applicant proposing to streamline multiple requirements applicable to a source, the permitting authority developing streamlining options for sources or source categories that would be subsequently accepted at the election of permittees, or the applicant working in agreement with the permitting authority after filing an

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monitoring equipment is inappropriate, such as when the monitoring equipment is no longer relevant or is technically infeasible (e.g., the source has switched to a closed loop process without emissions or the streamlined limit corresponds to levels too low for a monitor to measure, such as SO_2 emissions from a boiler firing pipeline quality natural gas.)

[13]Where recordkeeping is the means of determining compliance (e.g., in the miscellaneous metal parts and products coating rules, the typical role of monitoring is fulfilled by recordkeeping), the appropriate recordkeeping would be determined in the same manner described for monitoring.

[14]Where a standard includes recordkeeping associated with a limit in addition to recordkeeping linked to a monitoring device (e.g., a coating facility that has recordkeeping requirements pertaining to coating usage, as well as recordkeeping for monitoring associated with an add-on control), both types of recordkeeping must be incorporated into the permit.

[15]The result offers considerable potential to reduce the different reporting burdens associated with different applicable requirements well beyond what was previously available (e.g., synchronizing the required reporting cycles from different applicable requirements to coincide with the most stringent one beginning at the earliest required date). (See also Final General Provisions, § 63.10(a)(5), March 16, 1994.)

initial complete application. The first six of the following actions wuld be taken by the source or, as appropriate, by the permitting authority. The level of effort to complete these actions will depend on the relative complexity of the streamlining situation. The permitting authority would then perform steps seven and eight.

Step One - Provide a side-by-side comparison of all requirements included in the streamlining proposal that are currently applicable and effective for the specific emissions units of a source[16]. Distinguish between requirements which are emissions and/or work practice standards, and monitoring and compliance demonstration provisions.

Step Two - Determine the most stringent emissions and/or performance standard (or any hybrid or alternative limits as appropriate) consistent with the above streamlining principles and provide the documentation relied upon to make this determination. This process should be repeated for each emissions unit pollutant combination for which the applicant is proposing a streamlined requirement.

Step Three - Propose one set of permit terms and conditions (i.e., the streamlined requirements) to include the most stringent emissions limitations and/or standards, appropriate monitoring and its associated recordkeeping and reporting (see section II.A.2.e.), and such other conditions as are necessary to assure compliance with all applicable requirements.

Step Four - Certify compliance (applicant only) with

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[16]A future applicable requirement (e.g., MACT standard newly promulgated under section 112 with a compliance date 3 years in the future) may be determined to be the most stringent applicable requirement if compliance with it would assure compliance with less stringent but currently applicable requirements. In such a case, the source may propose either a streamlined requirement based on immediate compliance with the future applicable requirement or it may opt for a phased approach where the permit would contain two separate time-sensitive requirements. Under the latter approach, one streamlined requirement addressing all currently applicable requirements would be defined to be effective until the future applicable requirement became effective. The permit would also contain a second streamlined requirement which also addressed the future applicable requirement and would become the new streamlined requirement after expiration of the first streamlined requirement.

applicable requirements. The EPA is planning to revise its part 70 regulations to provide that a source may certify compliance with only the proposed streamlined limit. Until this is accomplished, EPA recommends that a source certifying compliance only with the streamlined limit indicate this in an attachment to the certification, so that it is clear that the certification is being made with respect to a set of terms and conditions that the source believes "assure compliance" with all applicable requirements. In any event, a source may only certify compliance with a streamlined limit if there is source compliance data on which to base such a certification. (Such data should be available where the streamlined requirement is itself an applicable requirement and may be available if the streamlined limit is an alternative limit, e.g., a previously State-only emissions limitation). If there is not, then certifications must instead be made relative to each of the applicable requirements judged to be less stringent and must be based on data otherwise required under them to make this point clear.

Step Five - Develop a compliance schedule to implement any new monitoring/compliance approach relevant to the streamlined limit if the source is unable to comply with it upon permit issuance. The recordkeeping, monitoring, and reporting requirements of the applicable requirements being subsumed would continue to apply in the permit (as would the requirement for the source to operate in compliance with each of its emissions limits) until the new streamlined compliance approach becomes operative.

Step Six - Indicate in the application submittal that streamlining of the listed applicable requirements under a permit shield (where available) is being proposed and propose the establishment of a permit shield which would state that compliance with the streamlined limit assures compliance with the listed applicable requirements. All emission and/or performance standards not subsumed by the streamlined requirements must be separately addressed in the part 70 permit application.

Step Seven - Evaluate the adequacy of the proposal and its supporting documentation. The EPA recommends that the permitting authority communicate its findings to the applicant and provide reasonable opportunity for the applicant to accept the findings or propose a resolution of the differences before issuance of a draft permit for public review. Where the permitting authority determines that the streamlining proposal is inadequate, the source, to retain its application shield, must expeditiously resolve any

problems identified by the permitting authority or update its prior application based on the individual applicable requirements previously proposed for streamlining.

Step Eight - Note the use of this process in any required transmittal of a part 70 application, application summary, or revised application to EPA and include the streamlining demonstration and supporting documentation in the public record. When the source is required to provide a copy of the application (or summary) directly to EPA, it must note the proposed use of streamlining. A copy of the streamlining demonstration must be submitted promptly to EPA along with the required copy of the application or application summary (where a summary may be submitted to EPA in lieu of the entire part 70 permit application) unless EPA has previously agreed with the permitting authority not to require it (e.g., the proposed streamlining is of a simple and/or familiar type with no new concerns).

4. Enforcement.

All terms and conditions of a part 70 permit are enforceable by EPA and citizens, unless certain terms are designated as being only State (or locally) enforceable. In addition, a source violating a streamlined emissions limitation in the part 70 permit may be subject to enforcement action for violation of one (or more) of the subsumed applicable emissions limits to the extent that a violation of the subsumed emissions limit(s) is documented.

Upon receiving a part 70 permit, a source implementing the streamlined approach would not be subject to an EPA enforcement action for any failure to meet monitoring, recordkeeping, and reporting requirements that are subsumed within the streamlined requirement and specified under the permit shield. These requirements would no longer be independently enforceable once the permit has been issued, provided that the source attempts in good faith to implement the monitoring, recordkeeping, and reporting requirements specified in the permit.

If subsequently the permitting authority or EPA determines that the permit does not assure compliance with applicable requirements, the permit will be reopened and revised.

5. Discussion.

As sources subject to title V identify all applicable requirements for inclusion in part 70 permit applications, they may find that multiple applicable requirements affect the same pollutant or performance parameter for a particular emissions

unit. Likewise, the requirements of federally-enforceable terms and conditions in preconstruction or operating permits may overlap with the requirements of other federally-enforceable rules and regulations.

In these instances, a source may be in compliance with the overall emissions limit of each of the applicable requirements, but be required to comply with a multitude of redundant or conflicting monitoring, reporting, or recordkeeping requirements. For example, a source owner faced with two emissions limits for the same pollutant at a specific emissions point may be required to install separate monitoring instrumentation and submit separate monitoring reports for each, even though one monitor can effectively assure compliance with both emissions limits. Furthermore, the recordkeeping and reporting associated with the unnecessary instrumentation may create an administrative burden for both the facility and the implementing agency without an associated gain in compliance assurance. Prior to title V there has been no federally-enforceable means to resolve this situation.

The EPA encourages permitting authorities to allow use by the permit applicant of the part 70 permit issuance process to streamline multiple applicable requirements to the extent the conditions of this policy can be met. In this way, the part 70 process with its procedural safeguards can be used to focus all concerned parties on providing for compliance with a single set of permit terms that assure compliance with multiple applicable requirements instead of maintaining the costs of multiple sets of controls, monitoring, recordkeeping, and reporting approaches.

The legal basis for streamlining multiple applicable requirements relies on section 504(a), which requires that title V permits contain emissions limits/standards and other terms as needed to assure compliance with applicable requirements. This section notably does not require repetition of all terms and conditions of an applicable requirement when another applicable requirement or part 70 permit condition (i.e., streamlined requirement) could be fashioned to otherwise assure compliance with that applicable requirement.

Section 504(f) lends additional certainty to permit streamlining. It specifically provides that the permitting authority may authorize that compliance with the permit may be deemed to be compliance with the Act provided that the permit includes all applicable requirements. Thus, this section allows the permitting authority to issue a permit containing a shield which protects a source against a claim that it is violating any applicable requirements listed in the permit shield as being subsumed under the streamlined requirement, provided that the

source meets the permit terms and conditions that implement the streamlined requirement.

Part 70 is also receptive to the issuance of streamlined permits. It contains parallel language to the statute for emissions limits and for permit shields in §§ 70.6(a)(1) and (f). Although language in § 70.6(a)(3) may appear to restrict streamlining by requiring that all "applicable" monitoring, recordkeeping, and reporting requirements be placed in the permit, EPA did not intend for these provisions to preclude streamlining. Instead, the Agency believes that the provisions should be consistent with the flexibility for streamlining provided in section 504(a) of the Act and in § 70.6(a)(1). To require otherwise would be anomalous and could frustrate legitimate streamlining efforts. The EPA intends to revise part 70 to reflect this understanding in a future rulemaking.

Streamlining may be limited in cases where an applicable requirement defines specific monitoring requirements as the exclusive means of compliance with an applicable emissions limit. Some interpret these cases to require that only one set of monitoring requirements may be used to determine compliance and that only these requirements may appear in the part 70 permit. The EPA believes instead that section 504(a) supersedes any need for such exclusive monitoring, but nonetheless recommends that States address any potential concerns by adopting certain SIP language in the future. States that choose to revise their existing SIP's to contain authorizing language to overcome any SIP exclusivity problems may use the example language in Attachment B. The EPA believes that similar flexibility should be provided to non-part 70 sources as well. To that end, Attachment B also provides a SIP process (currently in draft form) which would allow similar flexibility for non-part 70 sources.

With respect to NSR, States can process, in parallel with the part 70 permit issuance process, a revision to an existing NSR permit as necessary to resolve any exclusivity concerns within existing NSR permits (See first White Paper).

Currently the implementing regulations for section 112(l) at 40 CFR part 63, subpart E represent an additional constraint on the streamlining of applicable requirements in part 70 permits but only where a State or local agency has accepted a delegation of authority for a particular maximum achievable control technology (MACT) standard by virtue of its commitment to replace the Federal section 112 emissions standard with the State's own standard or program during the part 70 permit issuance process and using the procedures established in the Subpart E rule at § 63.94.. In § 63.94, EPA has specified the criteria for

approving such alternative limits and controls to meet an otherwise applicable section 112 requirement. These criteria must be satisfied to ensure that, after a State accepts delegation under § 63.94, any change to the Federal rule results in permit requirements that, among other things:

- o Reflect applicability criteria no less stringent than those in the otherwise applicable Federal standards or requirements;

- o Require levels of emissions control for each affected source and emissions point no less stringent than those contained in the Federal standards or requirements;

- o Require compliance and enforcement measures for each affected source and emissions point no less stringent than those in the Federal standards or requirements;

- o Express levels of control and compliance and enforcement measures in the same form and units of measure as the Federal standard or requirement for § 63.94 program substitutions;

- o Assure compliance by each affected source no later than would be required by the Federal standard or requirement.

Thus, when a State or local agency, after receiving § 63.94 delegation, seeks to replace a Federal section 112 emissions standard with requirements arising from its own air toxics standard or program (such as a toxics NSR program) during the part 70 permit issuance process, streamlining must take place by meeting both the criteria of § 63.94 and, except where contradictory, the criteria of this guidance. However, because most States are planning to take straight delegation of Federal emissions standards through subpart E procedures that do not rely on the part 70 permit issuance process, the EPA believes that the subpart E criteria for streamlining applicable requirements will be necessary only in a minority of instances. In the majority of cases, where a State takes delegation of a Federal standard (e.g., through straight delegation), the applicable section 112 requirements could be streamlined by following only the criteria outlined in section A.2., above. Where there are a large number of sources in the same category subject to a MACT standard for which the State has a regulation with equivalent requirements, EPA recommends that the State explore delegation options under § 63.93 to best utilize available resources.

It should be noted that the current subpart E rule may be subject to change as a result of pending litigation. Currently, EPA intends to revise the rule within the parameters of the

Court's decision to allow greater flexibility for approving State air toxics standards and programs and to minimize or remove (as appropriate) any constraint that subpart E might impose on the streamlining of applicable requirements in part 70 permits.

Finally, States are strongly encouraged to adopt regulatory provisions allowing permitting authorities to grant the permit shield where they cannot now do so. The permit shield is an effective means to clarify that for applicable requirements listed as subsumed under the streamlined requirements, compliance with the streamlined requirements is deemed to also be compliance with the subsumed requirements. Such an understanding is essential to support and defend the issuance of any permit which provides for the streamlined treatment of multiple applicable requirements.

If a permit shield is not available, a permittee can still be afforded significant enforcement protection by an explicit agency finding that in its judgment the streamlined permit term indeed provides for full compliance with all the permit limits that is subsumes. In such a case, it is imperative that the permit contain language that lists the applicable requirements being subsumed into the streamlined requirement and states that compliance with the streamlined requirement will be deemed compliance with the listed requirements.

B. Development Of Applications And Permits For Outdated SIP Requirements.

1. Issue.

Can sources file part 70 permit applications on the basis of locally adopted rules pending EPA SIP approval rather than the current SIP requirements? Can sources certify their compliance status on the same basis? Under what circumstances can permitting authorities issue and/or later revise part 70 permits based on such locally adopted rules?

2. Guidance.

a. General. In the first White Paper (section II.B.6.), EPA described a mechanism for simplifying permits where a source is subject to both a State adopted rule that is pending SIP approval and the approved SIP version of that rule. Under that approach, the pending SIP requirements would be incorporated into the State-only portion of the permit and would become federally enforceable upon EPA approval of the SIP. The EPA believes that in most instances, the approach described in the first White Paper adequately addresses the described problem. In some areas (most notably California), however, a sizable backlog of pending

SIP revisions exists, and a more far-reaching solution is needed. In today's guidance, therefore, another approach that may be used by EPA and permitting authorities to address this situation is described.

Under this new alternative, the permitting authority may allow that application completeness initially be based on locally adopted rules including those which would relax current (i.e., federally-approved) SIP requirements, provided that (1) the local rule has been submitted to EPA as a SIP revision, and (2) the permitting authority reasonably believes that the local rule (not the current SIP rule) will be the basis for the part 70 permit.

Where the permitting authority or the source has demonstrated to EPA's satisfaction[17] that the local rule is more stringent and therefore assures compliance with the current SIP for all subject sources, a permit application relying on the local rule may be deemed to be complete and a permit containing the requirements of the local rule rather than the current SIP could be issued for part 70 purposes. That is, consistent with section 504(a) of the Act, the part 70 permit need only contain emissions limits and other terms and conditions (i.e., the more stringent local rule) as needed to assure compliance with the applicable requirement (i.e., the current SIP regulation).

An EPA finding that a submitted rule assures compliance with the approved SIP rule would be a preliminary indication of EPA's belief that a part 70 permit incorporating the terms of the submitted rule would also assure compliance with the approved SIP. Such a finding would not equate to rulemaking, and so would not constitute a revision of the SIP. Therefore, a preliminary finding would not necessarily ensure that the proposed revision would ultimately be approved by EPA, nor would it protect a source from enforcement of the approved SIP.[18] Further, such a finding would not predetermine the outcome of the part 70 permit proceeding. Reviewers would have the ability to evaluate any

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[17]Where resources allow and the situation calls for it, EPA will go on record with a letter to the permitting authority with a list of rules that it has preliminarily determined will assure compliance with the corresponding SIP approved rule.

[18]If a part 70 permit is issued based upon a pending SIP revision and a permit shield is incorporated in the permit, compliance with the permit would be deemed to be compliance with all applicable requirements. If EPA or the permitting authority later discovers that the permit terms do not assure compliance with all applicable requirements, including the applicable SIP, the permit would have to be reopened and revised.

proposed permit terms or conditions based on pending SIP revisions to determine whether the permit assures compliance with applicable requirements, i.e., the approved SIP. However, EPA believes that a finding of this nature should provide the source and the permitting authority sufficient assurance to proceed with the issuance of a permit that reflects the terms of the submitted local rule rather than the approved SIP. Note that a part 70 permit can be based on a local rule even if the local rule is subsequently disapproved by EPA for SIP purposes (e.g., measure is more stringent than the current SIP but fails to meet SIP requirements for reasonably available control technology and/or to make reasonable further progress), provided: (1) a permit based on the local rule would assure compliance with all applicable requirements (including the approved SIP); and (2) the permit meets all part 70 requirements.

Where the local rule submitted to EPA as a SIP revision represents a relaxation of the current SIP requirement (e.g., the local rule would replace an existing technology forcing rule that has been determined to be unachievable in practice), a part 70 source may propose in its permit application to base its permit on the local rule in anticipation of EPA approval. However, a permit based on the local rule could not be issued prior to EPA approval of the rule. This is because a permit based on the relaxed requirements of the local rule could not assure compliance with the more stringent applicable requirement (the approved SIP), as required by section 504 of the Act. Similarly, a part 70 source may be subject to pending SIP revisions that may tighten certain current SIP obligations and relax others for sources in that source category. Here again the permitting authority could allow initial application completeness to be determined relying on the locally adopted rule, but the permit could not be issued without the current SIP requirements unless a source opted to demonstrate that the submitted rule represents, for that specific source, a more stringent requirement than the current SIP. In such a case, the part 70 permit could subsequently be issued for that source on the basis of the local rule, since the permit terms would assure compliance with the approved SIP.

b. Initial actions by EPA and permitting authorities. The EPA is committed to working with States within available resources to assure that the timetable for overall permit issuance is not adversely affected by pending SIP revisions that are not straightforward tightenings. The extent of the problem, however, will vary greatly and, in some cases, may require a specific plan of action between EPA and certain States to expedite SIP processing where the problem is substantial.

In California, where this problem is believed to be most

extensive, EPA, the districts, and the California Air Resources Board are in the process of identifying rules in the SIP backlog that are not straightforward tightenings or are relaxations of the currently approved SIP, and will target them for expeditious processing. These rules will be identified within a specified timeframe, generally within 1 year of the effective date of a district's part 70 program. The EPA's Region IX will enter into formal agreements with affected districts and will commit to take action on this "targeted" portion of the SIP backlog before comprehensive permit issuance for sources affected by the backlog would be required, provided this is consistent with the transition plan[19] (as it may be revised). Other EPA Regional Offices will determine the need and resources available for this type of exercise on a case-by-case basis. Region IX will also commit to process expeditiously any similar rules submitted or identified after the period of the formal agreement, although such processing would not necessarily occur before permits must be issued to sources affected by these rules.

Under Region IX's formal agreements, permitting authorities in the districts need not issue the portion of the part 70 permit covering emissions units affected by the targeted backlog until the rule adoption or change identified in the formal agreement has been acted on by EPA, consistent with the flexibility allowed in the permit issuance transition plan in the permitting authority's program. This should in most cases allow permitting authorities to delay issuing permits to sources to the extent they are affected by the targeted SIP backlog until EPA completes its review action on the pending SIP revisions. Where a transition plan contains a permit issuance schedule that would not allow postponing permit issuance until EPA has acted on the proposed SIP revisions, appropriate changes to the plan can still be made to defer permit issuance until EPA action on the targeted SIP backlog. Such changes would be made following the same approach described for changing application forms in EPA's first White Paper. Within these constraints, a permitting authority may allow for issuance of part 70 permits to the facility in phases such that permits covering those emissions units of the facility affected by the targeted SIP revision are issued later. This result is also consistent with the flexibility contained in § 70.2 (see definition of "Part 70 permit") for the permitting authority to issue multiple permits to one part 70 source if it makes sense to do so. Alternatively, the permitting authority could issue the permit in its entirety based on the current SIP.

The EPA agrees that delays in permit issuance described

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[19]Transition plan refers to the 3-year transition strategy for initial part 70 permit issuance described in § 70.4(b)(11).

above will not be cause for an EPA finding of failure by the permitting authority to adequately administer or enforce its part 70 program. Any initial permit issued under a phased approach (i.e., the first phase involves all emissions units unaffected by the SIP backlog targeted by EPA), however, does not shield the source from the enforceability of the requirements excluded in the first phase permit and the obligation to obtain permit conditions covering the excluded emissions units after EPA has acted on the relevant SIP rule backlog.

c. Ongoing actions. The preceding guidance should address the most significant problems associated with the development of part 70 permit applications and the subsequent issuance of part 70 permits that result from the existence of a SIP backlog. The EPA recognizes, however, that areas experiencing the most significant start-up problems with respect to pending SIP rules may well require an ongoing program to manage the potential SIP backlog so as to prevent significant problems of this nature from occurring in the future. In some situations it may be appropriate on a continuing basis for EPA to determine preliminarily whether a submitted rule can be listed as one which would assure compliance with the SIP rule it seeks to replace. This would enable the permitting authority to adjust its priorities for requiring application updates and for accomplishing permit issuance and revision.

For post application submittal, a source that has filed a complete application may opt to, or be required to, update its current application as a result of changes or pending changes to the SIP. The likelihood of these changes occurring will vary from area to area, and are most likely to affect sources scheduled later in the transition period for initial permit issuance. For example:

o A local rule previously relied upon may be amended by the State or district.

o Where a local rule that was previously listed in the formal agreement for expeditious SIP processing (because the rule is not a straightforward strengthening) is disapproved by EPA and the source has relied on that rule in preparing its application, the applicant must file an application update that either demonstrates that compliance with the local rule would assure compliance with the current SIP or demonstrates direct compliance with the current SIP.

o The adoption and submission to EPA of a more stringent local rule after an applicant has filed its application may present a new and desired opportunity for streamlining. If so, the applicant could opt to file an application update to

shift the compliance focus of its current application to the newly adopted local rule, which is pending SIP approval, provided it meets the streamlining criteria described in section II.A. above.

For post permit issuance, sources may also encounter changes to rule situations after initial permit issuance that could lead them to request a permit revision. For example, sources may propose a revision to an issued part 70 permit where a newly adopted local rule would present a desirable streamlining opportunity. The significant permit revision process would be required under the current part 70 to accomplish this change. Note that EPA in its revisions to part 70 may authorize permitting authorities to use a less extensive permit revision process.

To initiate the permit revision, the source must file an application to revise the permit to contain the requirements of local rule instead of the current SIP. This application must meet the previously defined and applicable streamlining criteria.

In response, the permitting authority may subsequently revise the permit based on the local rule in lieu of the current SIP where (1) the rule is listed by the EPA as one where compliance with it would assure compliance with the relevant portions of the current SIP, or (2) the applicant has provided a source specific demonstration consistent with the streamlining criteria in section II.A.2. that assures this result. A permit shield or similar permit condition should be issued for purposes of certainty. In the absence of a shield or similar permit condition, all aspects of the approved SIP remain enforceable, regardless of the source's compliance status with respect to the permit. The EPA encourages permitting authorities currently without provisions for incorporating permit shields to add them at their first opportunity.

3. Process.

a. Initial Applications. An applicant proposing to submit its part 70 permit application based on a local rule that has been submitted for EPA approval rather than the current SIP would take one of two courses of actions depending on the status of the local rule with EPA and/or the permitting authority:

The first course of action would be appropriate for local rules that (1) have been previously demonstrated to EPA's satisfaction to be at least as stringent as the approved SIP rule so as to assure compliance with it for all subject sources, (2) are otherwise authorized by the permitting authority based on its judgement that such rules will likely be the basis for the

part 70 permit (e.g. EPA approval of the rule is imminent), or (3) have been specifically identified in a formal agreement between the permitting authority and EPA for expeditious SIP processing, i.e., the "targeted backlog." Rules listed in a formal agreement will typically involve local rules pending SIP approval which do or could represent full or partial relaxations of the current SIP. Where they choose to use this approach, the permitting authority and EPA will maintain an up-to-date list of local rules which meet any of these criteria.

In preparing initial part 70 permit applications with respect to such local rules the applicant:

Step One - Will indicate in its application that it has opted for this approach, list or cross-reference all requirements from applicable local rules that are eligible for this approach, and refer to the list maintained for this purpose by the permitting authority.

Step Two - Will identify in the permit application the current SIP requirements that the pending SIP revision would replace.

Step Three - May choose to certify compliance with the requirement(s) of the pending local rule in lieu of the current SIP if there is sufficient source compliance data on which to base such a certification. (The EPA is proposing to revise its part 70 regulations to provide that such a certification would meet the requirements of § 70.5(c)(10).)

Step Four - May propose that a permit shield would be in effect upon permit issuance. For those listed local rules which are recognized by EPA as being able to assure compliance with the current SIP rule, the applicant would indicate in the application that a permit shield (or alternatively, other similar language where authority for a permit shield is not available) is being proposed to be incorporated into the permit to confirm this understanding.

The second course of action would be appropriate where the criteria specified above have not been met for a particular rule and an applicant still wants to base its initial part 70 application on such local rules pending SIP approval. In this instance, the process would be essentially the same but the source would have to demonstrate that compliance with the local rule would assure compliance with the current SIP (i.e., make an adequate demonstration consistent with the streamlining criteria described in section II.A.2. above.) and submit it with the permit application in step one. Again, if a part 70 permit application has already been submitted without streamlining but

the source agrees to subsequently pursue this option, the permitting authority may work with the source to support streamlining requirements during the permit development process.

b. Initial Permit Issuance Process. After receiving a complete application, the permitting authority must note where the applicant has proposed use of the approaches described above in section II.B.3.a. The note would be placed in the application summary, the application, or the revised application. Copies of the application summary, the application, or the revised application containing such proposals must be submitted promptly to EPA (unless EPA has agreed that the demonstration is of a type not required for advance submittal to EPA).

Where the rule is listed by EPA as one where compliance with it would assure compliance with the relevant portions of the current SIP, or the applicant has provided a source specific demonstration consistent with the streamlining outlined in section II.A.2., the permitting authority may proceed to issue the permit based on the local rule in lieu of the current SIP. A permit shield or similar permit condition which confirms this understanding should be issued for purposes of certainty.

If an applicant chooses to demonstrate that a local rule assures compliance with the applicable SIP for all affected emissions units, the permitting authority will evaluate this proposal and any supporting documentation. Upon completion of this evaluation and prior to releasing a draft permit public notice, the permitting authority is advised to communicate any concerns to the applicant and provide reasonable opportunity for the applicant to accept the findings or propose a resolution of the differences. This may cause some revisions to the application as originally filed.

If the permitting authority or EPA are not satisfied that the local rule (as it applies to the applicant's facility) assures compliance with the applicable SIP rule, the applicant must revise its application to rely on the SIP rule. All required application updates must be submitted on or before the reasonable deadline required by the permitting authority for the source to maintain its application shield.

Consistent with the flexibility allowed in the permit issuance transition plan (as it may be revised), the permitting authority may delay issuance of those portions of a source's permit that are covered by a rule identified in a Region IX type formal agreement, which targets certain SIP rules for expeditious processing, until EPA has acted on the relevant rule(s). Alternatively, comprehensive permits may be issued to such a source prior to the time that EPA has acted on the rule provided

that they are based on the current SIP (unless the source has provided an adequate streamlining demonstration).

4. Enforcement.

All terms and conditions of the part 70 permit are enforceable by EPA and by citizens. In addition, a source violating the emissions limitation in the part 70 permit is also subject to enforcement action for violation of the current SIP emissions limits if a violation of this limit can be documented.

Upon issuance of a part 70 permit based on the local rule, the permit terms and conditions implementing the local rule would become federally enforceable. A source would not be subject to an EPA enforcement action for any failure to meet monitoring, recordkeeping, and reporting requirements that are required under the currently approved SIP, if such an understanding has been specified in the permit. These requirements would no longer be independently enforceable, provided the source attempts in good faith to implement the monitoring, recordkeeping, and reporting approach required under the local rule.

If subsequently the permitting authority or EPA determines that the permit does not assure compliance with applicable requirements, the permit must be reopened and revised.

5. Discussion.

Sources in California districts currently are subject to several locally adopted rules which are pending before EPA as proposed SIP revisions. The majority of these local rules have been determined by the districts to be more stringent than the SIP rules that they seek to replace, although some of these rules would relax the current SIP requirements for certain affected sources. In some cases, technology-forcing SIP rules have been found to be infeasible to achieve and, instead of seeking to enforce them, districts have adopted achievable local rules. Until the local rules are approved into the SIP, sources are subject to both the local rule and the federally-approved version of the rule.

The resulting "outdated SIP" presents special problems to sources which must file a part 70 permit application. In particular, questions arise as to whether sources must complete their applications and certify compliance based on SIP rules which have been superseded by more stringent local rules or by rules that have been relaxed where, for example, the permitting authority has found the current SIP rules to be unachievable. Those problems, while most apparent in their effect on the start-up of a part 70 program, are also ongoing in nature and may

create a need to update initially complete permit applications and to revise issued permits. The EPA believes that these problems with outdated SIP rules are most extensive in California but are not unique to that State.

The EPA strongly believes that implementation of title V to the extent possible should complement, not complicate, the implementation of other titles, including title I, the purpose of which is to assure adoption of programs that will attain and maintain the national ambient air quality standards (NAAQS).[20] Accordingly, the Agency is providing this guidance which will allow sources and permitting authorities to rely on more stringent local rules for permit issuance. The overall strategy for sensitizing the SIP revision process to part 70 concerns presented in this guidance will allow sources to focus more on current air quality requirements in all aspects of part 70 permit application development and update, permit issuance, and permit revision.

The legal basis for recognizing a local rule pending SIP approval in lieu of the current, but less stringent, SIP requirement or for streamlining multiple applicable requirements is identical to the basis for adopting a streamlined emissions limit to replace multiple applicable requirements (see discussion in section II.A.5.). The opportunities for shifting to the more stringent local rule are correspondingly affected by the limitations previously described for the streamlining of applicable requirements.

C. Treatment Of Insignificant Emissions Units.

1. Issue.

How must sources address insignificant emissions units (IEU's) subject to at least one applicable requirement?[21]

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[20]This guidance is designed primarily to alleviate situations where the SIP backlog is both large and longstanding. It is not to be used as a means of anticipating the outcome of pending attainment status redesignations.

[21]An emissions unit can be an IEU for one applicable requirement and not for another. However, such a unit may be eligible for treatment as an IEU only with respect to those pollutants not emitted in significant amounts. The term "significant" as used in this policy statement does not have the meaning as used in § 52.21 (e.g., 15 tpy PM-10, 40 tpy VOC) but rather means that the emissions unit does not qualify for

(Insignificant emissions units are in most cases not directly regulated, and therefore could be left off the permit entirely, were it not for the presence of certain generic or facility-wide requirements that apply to all emissions units.) Must the application and the subsequent permit address each IEU individually and require periodic monitoring where it is not otherwise provided by a generically applicable requirement? On what basis can the initial and future compliance certifications be made for IEU's with generally applicable requirements?

2. Guidance.

The EPA interprets part 70 to allow considerable discretion to the permitting authority in tailoring the amount and quality of information required in permit applications and permits as they relate to IEU's. In general, permit applications must contain sufficient information to support the drafting of the part 70 permit (including certain information for IEU's subject to only generally applicable requirements) and to determine compliance status with all applicable requirements. The EPA, however, interprets part 70 to allow permitting authorities considerable discretion as to the format and content of permits, provided that compliance with all applicable requirements, including those for IEU's, is assured. The Agency believes that the clarifications contained herein afford permitting authorities sufficient flexibility to treat IEU's in a manner commensurate with the environmental benefits that may be gained from their inclusion in the permit.

a. Permit Applications - Information. With regard to part 70 requirements to describe and list IEU's in applications and permits, the permitting authority can use the generic grouping approach for emissions units and activities as discussed in the first White Paper. In addition, the requirement to identify all applicable requirements, as it related to IEU's subject to generally applicable requirements, can normally be addressed by standard or generic permit conditions with minimal or no reference to any specific emissions unit or activity. The EPA has reviewed and acquiesced in the issuance of permits wherein generally applicable requirements are incorporated through the use of tables describing a tiered compliance regime for these requirements as they affect different sizes of emissions units, including a distinct and more streamlined compliance regime for IEU's. Different generic permit tables may be necessary to cover the situation for a particular type of IEU which is governed by different applicable requirements. Similarly, the first White Paper provides that no emissions

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treatment in the application as an insignificant emissions unit.

estimates need be provided for even regulated emissions streams where it would serve no useful purpose to do so. This should be the case for IEU's where the amount of emissions from a unit is not relevant to determining applicability of, or compliance with, the requirement. Except where the contributions of IEU's would need to be more precisely known to resolve issues of applicability or major source status would the permitting authority need to request emissions estimates for part 70 purposes.

b. Permit Applications - Initial Compliance Certifications. Section 70.5(c)(9) requires complete part 70 applications to contain a certification of compliance with all applicable requirements by a responsible official and a statement of the methods used for determining compliance. This certification must be based on a "reasonable inquiry" by the responsible official. The EPA believes that, for the generally applicable or facility-wide requirements applying to an IEU, reasonable inquiry for initial certifications need only be based on available information, which would include any information required to be generated by the applicable requirement. Regarding the latter, and as is true for any applicable requirement, the initial certification can be based on only the latest cycle of required information (e.g., a source could generally rely on a demonstration of compliance resulting from the most recent required monitoring, notwithstanding the existence of prior monitoring indicating non-compliance at a previous point in time). Where an applicable requirement (generally applicable or otherwise) does not require monitoring, the § 70.5(c)(9) requirement to certify compliance does not itself require that monitoring be done to support a certification. Similarly, there is no need to perform an emissions test to support this compliance certification if none is required by the applicable requirement itself. The EPA interprets § 70.5(c)(9) to allow for a certification of compliance where there is no required monitoring and, despite a "reasonable inquiry" to uncover other existing information, the responsible official has no information to the contrary.

c. Permit Content - Applicable Requirements. With regard to part 70 obligations to include all applicable requirements in the permit, the permitting authority can also use the generic grouping approach for emissions units and activities as discussed in the first White Paper. That is, generally applicable requirements can normally be adequately addressed in the part 70 permit by standard permit conditions with minimal or no reference to any specific emissions unit or activity, provided that the scope of the requirement and the manner of its enforcement are clear. As noted above, different generic permit provisions may be necessary to cover the situation for which different types of

IEU's are governed by different applicable requirements.

d. Permit Content - Monitoring, Recordkeeping, and Reporting. Section 70.6(a)(3)(i) requires all applicable requirements for monitoring and analysis procedures or test methods to be contained in part 70 permits. In addition, where the applicable requirement does not require periodic testing or monitoring (which may consist of recordkeeping designed to serve as monitoring), the permitting authority must prescribe periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit. Many of the generically applicable requirements for IEU's have a related test method, but relatively few have a specific regimen of required periodic testing or monitoring.

The EPA believes that the permitting authority in general has broad discretion in determining the nature of any required periodic monitoring. The need for this discretion is particularly evident in the case of generally applicable requirements, which tend to cover IEU's as well as significant emissions units. The requirement to include in a permit testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor with respect to all emissions units and applicable requirement situations. It does not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emissions limitations or other requirements under normal operating conditions. In particular, where the establishment of a regular program of monitoring would not significantly enhance the ability of the permit to assure compliance with the applicable requirement, the permitting authority can provide that the status quo (i.e., no monitoring) will meet § 70.6(a)(3)(i). For IEU's subject to a generally applicable requirement for which the permitting authority believes monitoring is needed, a streamlined approach to periodic monitoring, such as an inspection program to assure the proper operation and maintenance of emissions activities (e.g., valves and flanges), should presumptively be appropriate.

The EPA's policy on IEU monitoring needs is based on its belief that IEU's typically are associated with inconsequential environmental impacts and present little potential for violations of generically applicable requirements, and so may be good candidates for a very streamlined approach to periodic monitoring. As EPA noted in the first White Paper, generally applicable requirements typically reside in the SIP. Permitting authorities therefore not only have the best sense of which requirements qualify as generally applicable, but also where it is appropriate to conclude that periodic monitoring is not

necessary for IEU's subject to these requirements. Where the source ascertains that the permitting authority will not require periodic monitoring for IEU's, it can of course omit a periodic monitoring proposal from the application.

e. Permit Content - Compliance Certifications. Section 70.6(c)(5) requires in part that each permitted source submit no less frequently than annually a certification of its compliance status with all the terms and conditions of the permit. This certification will be based on available information, including monitoring and/or other compliance terms required in the permit. Where a particular emissions unit presents little or no potential for violation of a certain applicable requirement, the "reasonable inquiry" required by title V can be abbreviated. Since it can be determined in the abstract that violation of the requirement by these emissions units is highly improbable, it is reasonable in that instance to limit the search for information to what is readily available. As noted above, EPA believes that an IEU subject to a generally applicable requirement typically presents little or no potential for violation of those requirements. It follows that where, for instance, a permit does not require monitoring for IEU's subject to a generally applicable requirement, and there were no observed, documented, or known instances of non-compliance, an annual certification of compliance is presumptively appropriate. Similarly, where monitoring is required, an annual certification of compliance is also appropriate when no violations are monitored and there were no observed, documented, or known instances of non-compliance.

3. Discussion.

Many of the concerns expressed to EPA regarding the treatment of IEU's in the application and permit arise because IEU's are in most cases not directly regulated, and therefore could be left off the permit entirely, were it not for the presence of certain generic requirements that apply to all emissions units. Though the focus of concern is the applicability of the generic requirements to IEU's, response to these concerns derive primarily from the flexibility that exists in part 70 for dealing with generically applicable requirements. In implementing this flexibility, it may be appropriate for the permitting authority to further distinguish between units that have been designated as insignificant and those that have not. This is so because the relative size of a unit can be an important factor in deciding how to fashion permit terms even for a generically applicable requirement, and State-established IEU's normally define the smallest emissions points. However, EPA notes that, as a matter of part 70 interpretation, whether a unit has been designated as insignificant is not necessarily critical to its treatment in the part 70 permit.

Concerns have been expressed that addressing in part 70 permits the relatively trivial portion of emissions attributable to IEU's will consume a disproportionate share of the total resources available to issue part 70 permits. That is, according to their understanding of part 70, applicants and permitting authorities will expend greater resources than warranted to determine the specific applicability of requirements to IEU's, how compliance with them will be assured, and the basis on which the certification of compliance status of the source with respect to these IEU's would be made.

The EPA believes that the policy described for addressing generically applicable requirements in applications and permits as they apply to IEU's allows permitting authorities sufficient flexibility to streamline the required administrative effort commensurate to the environmental significance of the varying types of IEU situations. This should prevent the potentially high but unintended level of costs identified by certain sources and permitting authorities from occurring in the future with respect to IEU's.

D. Use Of Major Source And Applicable Requirement Stipulation.

1. Issue.

When an applicant stipulates that it is a major source and subject to specific applicable requirements, how much, if any, additional information related to applicability is necessary in the part 70 permit application?

2. Guidance.

If an applicant stipulates that it is a major source[22] and subject to specific applicable requirements, it need not provide additional information in its application to demonstrate applicability with respect to those requirements, provided that (1) the permitting authority has had previous review experience with a particular source (e.g., issued it a permit), or (2) otherwise has an adequate level of familiarity with the source's operation (e.g., current emissions inventory information). This does not affect the requirement to provide information for other purposes under part 70, such as to support a compliance certification or a request for a permit shield or to describe the emissions activities of its site (see first White Paper).

Accordingly, permitting authorities may allow the applicant

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[22]If an applicant stipulates it is a major source, it must list all pollutants for which it is major.

to stipulate that:

- o Its facility is a major source and subject to part 70 permitting, without providing any additional information for the applicability determination;

- o It is subject to specific applicable requirements, to be included in its part 70 permit, without providing additional information to establish applicability for stipulated requirements; or

- o It is subject to only portions of an applicable requirement and state that it is not subject to other portions. Such a stipulation must explicitly state which portion of the rule applies and which does not and an explanation must be provided for this conclusion.

Stipulation by a source to major source status or specific applicable requirements in a part 70 application does not preclude the permitting authority from requesting additional information from the applicant for establishing the applicability of non-stipulated requirements or for verifying a stipulation that certain requirements are not applicable.

3. Discussion.

In general, part 70 requires that applications contain information to the extent needed to determine major source status, to verify the applicability of part 70 or applicable requirements, and to compute a permit fee (as necessary). Section 70.5(c) requires the application to describe emissions of all regulated air pollutants for each emissions unit.

In the first White Paper, EPA indicated a substantial degree of discretion for permitting authorities in this area. It indicates that States may adopt different approaches to meet the minimum program requirements established by the part 70 regulations depending on local needs. In many instances, a qualitative description of emissions will satisfy this standard. However, the applicant may need to provide more detailed information for purposes other than determining applicability and to foster efficiency in the permitting program.

For the purpose of determining the applicability of part 70 or other specific requirements, the information required in an application should be streamlined for the mutual benefit of the applicant and the permitting authority. An applicant that stipulates it is a major source subject to part 70 and to other applicable requirements should not be required to provide any additional information to verify those facts in its part 70

application. However, the applicant must provide sufficient information to allow the permitting authority to impose the applicable requirement. In addition, the resulting application streamlining would not relieve the applicant from submitting, or the permitting authority from reviewing, emissions or other data for part 70 purposes other than determining applicability.

In the case where there is no dispute that a stationary source is subject to part 70, and the applicant stipulates that the source is a part 70 source in the application, no further information would be required for applicability determination. An example would be a source which is currently operating under a prevention of significant deterioration permit because it is major for PM-10. Both the source and the permitting authority agree that the source is subject to the State's part 70 program.

A source may also streamline the part 70 permit process by stipulating that specific applicable requirements apply. This does not relieve the source of its obligation to identify all applicable requirements or preclude the permitting authority from requesting additional information, including information pertaining to the applicability of requirements not covered in the stipulation. For example, a stationary source may stipulate it is subject to a SIP rule. However, the permitting authority may suspect that the source is also subject to a New Source Performance Standard (NSPS), but may need more information for confirmation. In this case, the permitting authority would request additional information related to the applicability of the NSPS.

Similarly, an applicant may stipulate that it is subject to only portions of an applicable requirement and state that it is not subject to other portions. In such case, the permitting authority may request the applicant to provide additional information to demonstrate that it is not subject to requirements in question. However, if a source requests a permit shield, additional information to demonstrate the non-applicability of these requirements must be submitted.

E. Referencing Of Existing Information In Part 70 Permit Applications And Permits.

1. Issue.

Can an applicant in its permit application, and can the permit itself, reference existing information that is available at the permitting authority? Also, can the permit application and the permit reference applicable requirements through citation rather than by a complete reprinting of the requirements themselves in the part 70 permit application or permit?

2. Guidance.

a. General. Information that would be cited or cross referenced in the permit application and incorporated by reference into the issued permit must first be currently applicable and available to the permitting authority and public[23]. The information need not be restated in the part 70 application. Standardized citation formats should be established by the permitting authority to facilitate appropriate use of this mechanism.

Referenced documents must also be specifically identified. Descriptive information such as the title or number of the document and the date of the document must be included so that there is no ambiguity as to which version of which document is being referenced. Citations, cross references, and incorporations by reference must be detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to misinterpretation. Where only a portion of the referenced document applies, applications and permits must specify the relevant section of the document. Any information cited, cross referenced, or incorporated by reference must be accompanied by a description or identification of the current activities, requirements, or equipment for which the information is referenced.

b. Permit Applications. The applicant and the permitting authority should work together to determine the extent to which part 70 permit applications may cross reference agency-issued rules, regulations, permits, and published protocols, and existing information generated by the applicant. To facilitate referencing existing information, permitting authorities should identify the general types of information available for this purpose. To the extent that such information exists and is readily available to the public, the following types of information may be cited or cross referenced (as allowed by the permitting authority)[24]:

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[23]Referenced documents must be made available (1) as part of the public docket on the permit action or (2) as information available in publicly accessible files located at the permitting authority, unless they are published or are readily available (e.g., regulations printed in the Code of Federal Regulations or its State equivalent).

[24]Use of cross-referencing does not shift any burden of reproducing or otherwise acquiring information to the permitting authority.

- Rules, regulations, and published protocols.

- Criteria pollutant and HAP emission inventories and supporting calculations.

- Emission monitoring reports, compliance reports, and source tests.

- Annual emissions statements.

- Process and abatement equipment lists and descriptions.

- Current operating and preconstruction permit terms.

- Permit application materials previously submitted.

- Other materials with the approval of the permitting authority.

Applicants are obligated to correct and supplement inaccurate or incomplete permitting authority records relied upon for the purposes of part 70 permit applications. The responsible official must certify, consistent with § 70.5(d), to the truth, accuracy, and completeness of all information referenced.

c. Permits. Incorporation by reference in permits may be appropriate and useful under several circumstances. Appropriate use of incorporation by reference in permits includes referencing of test method procedures, inspection and maintenance plans, and calculation methods for determining compliance. One of the key objectives Congress hoped to achieve in creating title V, however, was the issuance of comprehensive permits that clarify how sources must comply with applicable requirements. Permitting authorities should therefore balance the streamlining benefits achieved through use of incorporation by reference with the need to issue comprehensive, unambiguous permits useful to all affected parties, including those engaged in field inspections.

Permitting authorities may, after listing all applicable emissions limits for all applicable emissions units in the part 70 permit, provide for referencing the details of those limits, rather than reprinting them in permits to the extent that (1) applicability issues and compliance obligations are clear, and (2) the permit includes any additional terms and conditions sufficient to assure compliance with all applicable requirements[25].

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[25]In the case of a merged permit program, i.e., where a State has merged its NSR and operating permits programs, previous

Where the cited applicable requirement provides for different and independent compliance options (e.g., boilers subject to an NSPS promulgated under section 111 may comply by use of low sulfur fuel or through add-on of a control device), the permitting authority generally should require that the part 70 permit contain (or incorporate by reference) the specific option(s) selected by the source. Alternatively, the permit could incorporate by reference the entire applicable requirement provided that (1) such reference is unambiguous in its applicability and requirements, (2) the permit contains obligations to certify compliance and report compliance monitoring data reflecting the chosen control approach, and (3) the permitting authority determines that the relevant purposes of title V would be met through such referencing. The alternative approach would not be allowable if changing from one compliance option to another would trigger the need for a prior review by the permitting authority or EPA (e.g. NSR), unless prior approval is incorporated into the part 70 permit (i.e., advance NSR).

The EPA does not recommend that permitting authorities incorporate into part 70 permits certain other types of information such as the part 70 permit application (see first White Paper).

3. Discussion.

Title V and part 70 do not define when citation or cross-referencing in permit applications would be appropriate, although it obviously would not be allowed where such citations or cross-references would not support subsequent development of the part 70 permit. The EPA's first White Paper states that a permitting authority may streamline part 70 applications by allowing the applicant to cross-reference a variety of documents including permits and Federal, State, and local rules. This guidance further provides that where an emissions estimate is needed for part 70 purposes but is otherwise available (e.g., recent submittal of emissions inventory) the permitting authority can allow the source to cross-reference this information for part 70 purposes.

Permitting authorities' files and databases often include information submitted by the applicant which can also be required by part 70. Development and review of part 70 permit applications could be streamlined if information already held by

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NSR permits expire. This leaves the part 70 permit as the sole repository of the relevant prior terms and conditions of the NSR permit. Under these circumstances, it is not possible to incorporate by reference the expired NSR permits.

the permitting authority and the public is referenced or cited in part 70 permit applications rather than restated in its entirety. Similarly, specific citations to regulations that are unambiguous in their applicability and requirements as they apply to a particular source will reduce the burden associated with application development.

Incorporation by reference can be similarly effective in streamlining the content of part 70 permits. The potential benefits of permit development based on an incorporation by reference approach include reduced cost and administrative complexity, and continued compliance flexibility as enforceably allowed by the underlying applicable requirements.

Expectations for referencing with respect to permit content are somewhat better defined than for permit applications. Section 504(a) states that each permit "shall include enforceable emissions limitations and standards" and "such other conditions as are necessary to assure compliance with the applicable requirements." In addition, section 504(c) requires each permit to "set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions." Analogous provisions are contained in §§ 70.6(a)(1) and (3). The EPA interprets these provisions to place limits on the type of information that may be referenced in permits. Although this material may be incorporated into the permit by reference, that may only be done to the extent that its manner of application is clear.

Accordingly, after all applicable emissions limits are placed in the part 70 permit and attached to the emissions unit to which they apply, the permitting authority may allow referencing where it is specific enough to define how the applicable requirement applies and where using this approach assures compliance with all applicable requirements. This approach is a desirable option where the referenced material is unambiguous in how it applies to the permitted facility, and it provides for enforceability from a practical standpoint. On the other hand, it is generally not acceptable to use a combination of referencing certain provisions of an applicable requirement while paraphrasing other provisions of that same applicable requirement. Such a practice, particularly if coupled with a permit shield, could create dual requirements and potential confusion.

Even where the referenced requirement allows for compliance options, the permitting authority may issue the permit with incorporation of the applicable requirement provided that the compliance options of the source are enforceably defined under available control options, appropriate records are kept and

reports made, and any required revisions to update the permit with respect to specific performance levels are made. This treatment would be analogous to the flexibility provided to sources through the use of alternative scenarios.

Attachment A

Approval of Alternative Test Methods

The part 63 general provisions, as well as other EPA air regulations implementing sections 111 and 112 of the Act, allow only EPA-approved test methods to implement emissions standards that are established by States to meet Federal requirements. Accordingly, streamlining cannot result in any requirement relying on a State-only test method unless and until EPA, or the permitting authority acting as EPA's delegated agency, approves it as an appropriate method for purposes of complying with that streamlined standard. Currently, all States may be delegated authority to make decisions regarding minor revisions to EPA approved test methods (i.e., minor changes are those that have isolated consequences, affect a single source, and do not affect the stringency of the emissions limitation or standard). The EPA is exploring options for defining where delegation to States is appropriate for reviewing major revisions or new test methods, and for expediting the approval process where the Agency retains final sign-off authority. The EPA recognizes that its approval must generally occur in a timeframe consistent with the time constraints of the part 70 permit issuance process. Until further guidance on this subject is issued, States must obtain EPA approval for all State-only test methods which represent major changes or alternatives to EPA-approved test methods prior to or within the 45-day EPA review period of the proposed permit seeking to streamline requirements.

With respect to SIP requirements, the ability for a permitting authority to authorize use of a different test method depends on the governing language contained in the SIP. For example, some SIP's expressly connect a test method with a particular emissions limit but allow for the use of an equally stringent method. Other SIP's contain a more exclusive linkage between an emissions limit and its required test method (i.e., limit A as measured by test method B). The SIP-approved test method can be changed only through a SIP revision unless the SIP contains provisions for establishing alternative test methods. Attachment B contains example SIP language which provides a mechanism that can establish an alternative applicable requirement in such cases without the need for a source-specific SIP revision.

Permitting authorities may implement streamlining which involves alternative or new test methods within the flexibility granted by the SIP and any delegation of authority granted by EPA (where section 111/112 standards are involved). Permit applications containing a request for a streamlined requirement based on an alternative or new test method must, to be complete,

demonstrate that the alternative or new test method would determine compliance at the same or higher stringency as the otherwise applicable method. The EPA expects to receive expeditiously (i.e., well in advance of any draft permit issuance) those portions of an application dealing with a proposal for streamlining, including any demonstration of test method adequacy. Any required EPA approval of an alternative or new test method need not be obtained as a precondition for filing a complete application, but it must be secured before the final part 70 permit can be issued. As mentioned previously, EPA intends to structure its approval process to comport reasonably with the timelines for part 70 permit issuance.

Attachment B

SIP Provisions For Establishing Alternative Requirements

I. Overview.

States may revise their SIP's to provide for establishing equally stringent alternatives to specific requirements set forth in the SIP without the need for additional source-specific SIP revisions. To allow alternatives to the otherwise-applicable SIP requirements (i.e., emissions limitations, test methods, monitoring, and recordkeeping) the State would include language in SIP's to provide substantive criteria governing the State's exercise of the alternative requirement authority.

II. Example Language For Part 70 Sources To Establish Alternative SIP Requirements.

The following is an example of enabling language that could be used to provide flexibility in the SIP for allowing alternative requirements to be established for part 70 sources.

> In lieu of the requirements imposed pursuant to (reference specific applicable sections(s) or range of sections to be covered), a facility owner may comply with alternative requirements, **provided** the requirements are established pursuant to the part 70 permit issuance, renewal, or significant permit revision process and are consistent with the streamlining procedures and guidelines set forth in section II.A. of White Paper Number 2.
>
> For sources subject to an approved part 70 program, an alternative requirement is approved for the source by EPA if it is incorporated in an issued part 70 permit to which EPA has not objected. Where the public comment period precedes the EPA review period, any public comments concerning the alternative shall be transmitted to EPA with the proposed permit. If the EPA and public comment periods run concurrently, public comments shall be transmitted to EPA no later than 5 working days after the end of the public comment period. The Director's [permitting authority's] determination of approval is not binding on EPA.
>
> Noncompliance with any provision established by this rule constitutes a violation of this rule.

III. Example Language For Non-Part 70 Sources To Establish Alternative SIP Requirements.

[NOTE: This section is a draft that EPA expects to finalize after appropriate revisions in the near future.]

For sources not subject to an approved part 70 program, the following is an example of enabling language that States may use to revise/submit SIP rules which would provide flexibility in the SIP for allowing alternative requirements to be established.

A. Procedures.

1. General. In lieu of the requirements imposed pursuant to [reference applicable sections] of this plan, a source owner may comply with an alternative requirement, provided that the Director approves it consistent with the procedures of this paragraph and the criteria of paragraph B.

2. State Review Procedure. The Director may establish an alternative requirement in [a review process defined by the State], provided that the requirements of this paragraph are met for EPA and public review and for notification and access are met. The Director's determination of approval is not binding on EPA.

3. Public Review. The Director shall subject any proposed alternative to adequate public review but may vary the procedures for, and the timing of, public review in light of the environmental significance of the action. For the following types of changes [add list of de minimis actions subject to EPA review], no public review shall be necessary for the approval of the alternative.

4. EPA Review. The Director shall submit any proposed alternative to the Administrator through the appropriate Regional Office, except for the following types of changes [add list of de minimis actions subject to EPA review] no EPA review shall be necessary for the approval of the alternative. Until the specific alternative SIP requirement has completed EPA review, the otherwise applicable SIP provisions will continue to apply.

5. Periodic Notification And Public Access. For all actions taken by the State to establish an alternative requirement, the Director shall provide in a general manner for periodic notification to the public on at least a quarterly basis and for public access to the records regarding established alternatives and relevant supporting documentation.

6. Enforcement. Noncompliance with any alternative established by this provision constitutes a violation of this rule. The EPA and the public may challenge such an alternative limit on the basis that it does not meet the criteria contained in the SIP for establishing such an

alternative. In addition, EPA and the public can take enforcement action against a source that fails to comply with an applicable alternative requirement.

B. General Criteria for Evaluating Alternatives.

1. Applicability. The unit(s) to which the requirements apply must be specified in the underlying SIP and in the permit/alternative. If percentage reductions are required from the source, the baseline must be clearly set. The SIP must require the submission of all the information necessary to establish the baseline, and the alternative requirement must achieve the reduction called for in the SIP.

2. Time. The alternative must specify the effective date of the alternative requirement. The underlying requirement of the SIP shall remain in effect until the effective date of the alternative. The alternative must clearly specify any future-effective dates or any compliance schedules that apply to the source under regulations in effect at the time of issuance. For instance, a source may be due to comply with requirements promulgated before the permit/alternative was issued, but which are effective prior to the expiration of the permit/alternative.

3. Effect of changed conditions. If alternative emissions limitations or other requirements are allowed in the underlying SIP, the associated documentation with the changed conditions must clearly demonstrate the alternative requirement is no less stringent than the original SIP requirement.

4. Standard of conduct. The alternative proposal must clearly state what requirements the source must meet. For example, the SIP must specify the emissions limit and what alternatives are acceptable. The alternative proposal must contain limits, averaging times, test methods, etc., that are no less stringent and must address how they are no less stringent than the underlying SIP requirements. The alternative proposal must also show whether it applies on a per-source or per-line basis or is facility-wide.

5. Transfer Efficiency. Any SIP allowing alternative emissions limits and using transfer efficiency in determining compliance must explicitly state the circumstances under which a source may use improved transfer efficiency as a substitute for meeting the SIP limit. The improvement should be demonstrated through testing and an

appropriate baseline and test method should be specified.[1] See draft "Guidelines for determining capture efficiencies" for criteria for evaluating alternative capture efficiency requirements.

6. Averaging Time. Both the SIP and the alternative proposal must explicitly contain the averaging time associated with each emissions limit (e.g., instantaneous, three hour average, daily, monthly, or longer). The time must be sufficient to protect the applicable NAAQS. The alternative proposal must demonstrate that the averaging time and the emissions limit in the alternative are as stringent as those in the original SIP requirements.

7. Monitoring and Recordkeeping. The alternative proposal must state how the source will monitor compliance with the emissions requirement, and detail how the proposed method compares in accuracy, precision, and timeliness to the SIP-approved method. Records and monitoring data must be retained for at least the same period of time as required by the SIP. The method must enable compliance determinations consistent with the averaging time of the emissions standard.

8. Test Methods. The alternative proposal must detail how the proposed test method in association with its particular emissions requirement (or rule) is at least as stringent as the approved method in association with its emissions limit (or rule) considering the accuracy, reliability, reproducibility, and timeliness of each test method taken in combination with its emissions limit. The application or proposal must also address how the change affects measurement sensitivity and representativeness, describe the need for the change, and indicate if the change is needed for unique conditions related only to the source in question. The method must enable a compliance determination consistent with the averaging time of the emissions standard associated with it.

9. Act Requirements. The alternative must meet the all applicable Act requirements (e.g., for reasonably available control technology, 15% VOC reduction, etc.) and must not interfere with any requirements of the Act, including any regarding the SIP's attainment demonstration and requirements for reasonable further progress.

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[1]Implied improvements noted by the NSPS auto coating transfer efficiency table cannot be accepted at face value.

10. Production Level. The emissions are no greater than the SIP allowable emissions at the same production level. Pre-1990 production/operation scenarios cannot be used as part of any demonstration that the alternative requirements are as stringent as those in the SIP. Also, the demonstration must be performed using an EPA-approved test methods.

Guidelines:

Practical Enforceability

September 9, 1999

What is Practical Enforceability?

A permit is enforceable as a practical matter (or practically enforceable) if permit conditions

- establish a clear legal obligation for the source
- allow compliance to be verified.

Providing the source with clear information goes beyond identifying the applicable requirement. It is also important that permit conditions be unambiguous and do not contain language which may intentionally or unintentionally prevent enforcement.

Emission limits or other applicable requirements must have associated monitoring, recordkeeping, and reporting to make it possible to verify compliance and provide for documentation of non-compliance. (More information on monitoring to verify compliance is included in the Guidelines section on Periodic Monitoring.) Further, the permit must not prevent the use of *credible evidence* by the source, public, permitting authority, or EPA.

What is Credible Evidence?

Section 113(a) of the Act gives EPA the authority to bring enforcement actions "on the basis of *any information available* to the Administrator." In an enforcement action, the court then decides whether the available information is *credible evidence* of a violation. Credible evidence includes (but is not limited to):

- The reference test method
- Other evidence that is comparable to information generated by the reference test method, such as
  - Engineering calculations
  - Indirect estimates of emissions
  - CEMS data
  - Parametric monitoring data

Data need not be required to be collected in a title V permit in order to be considered credible.

Since any credible evidence can be used to show a violation of or, conversely, demonstrate compliance with an emissions limit, it is important that permit language not exclude the use of any data that may provide credible evidence. The permit must specify the source's obligations for monitoring in a way that does not establish an exclusive link between the test method and the emissions limit. Permit language may not

- Specify that only certain types of data may be used to determine compliance
- Specify that certain data is more credible than other types of data, or
- Include language that excuses violations under specific circumstances.

In general, the permit should simply tell the source what it must do (e.g., monitor pressure drop in such a manner, take corrective action under these conditions, etc.) For example, "The permittee shall monitor the emissions unit weekly in accordance with method X."

It is not necessary to say that a term assures compliance or that an activity is required to assure compliance.

Why Review Permits for Practical Enforceability?

The practical enforceability of a permit should be reviewed to assure the public's and EPA's ability to enforce the title V permit is maintained, and to clarify for the title V source its obligations under the permit. Possible consequences of not examining the permit for practical enforceability include:

- source noncompliance due to misunderstanding unclear permit conditions,
- permit conditions creating new exemptions from requirements in the underlying applicable requirements, and
- permit language that allows noncompliance, or does not promote detection and prompt correction of problems leading to noncompliance.

The first table below identifies key permit terms to examine for practical enforceability. The second table provides examples of common language pitfalls and how they can be corrected.

What Types of Conditions Affect Practical Enforceability?

Conditions Affecting Enforceability...	Why is it important?	What to Look for...
Emission Limits	Title V conditions must assure compliance with all applicable requirements. To assure that emission limits will be complied with, the limits must be written in a practically enforceable way. The title V permit must clearly include each limit and associated information from the underlying applicable requirement that defines the limit, such as averaging time and the associated reference method.	When reviewing an emission limit, make sure that • The limit is clearly written, • The meaning of the applicable requirement has not been altered, • The averaging time is included, • The reference diluent concentration (e.g. "As determined at 15% O_2") is included, • The source is required to comply with the limit at all times unless exceptions are specifically allowed for by the applicable requirement, • The specific reference test method associated with the limit is identified, and • The number of test runs is specified (if not included in the reference method).
Potential to Emit Limits The title V permit may be used by a source to establish limits on potential to emit (PTE) for purposes of avoiding an otherwise applicable requirement.	These emission limits are important because a source has agreed to comply with a limit set at a level below major source emission thresholds in order to not be subject to requirements such as NSR, PSD, or MACT. These types of limits are one of the few types of conditions that may be established solely in the title V permit, without an underlying applicable requirement. Since the title V permit is the mechanism for creating these limits, it is also the primary mechanism for assuring they are enforceable as a practical matter.	In addition to the general concerns for any emission limits listed above, PTE limit must also: • Have short averaging times. Averaging times must be no longer than one day, or if set on a rolling basis, on a 12-month rolling average, calculated no less frequently than daily. • Otherwise meets the requirements of the June 13, 1989 Hunt/Seitz memorandum "Guidance on Limiting Potential to Emit in New Source Permitting."

What Types of Conditions Affect Practical Enforceability?

Conditions Affecting Enforceability...	Why is it important?	What to Look for...
Director's Discretion This term refers to a permit condition that is phrased in such a way that the decision as to whether the condition is met is left to the director of the permitting authority. Example: "The source shall maintain adequate records, *as determined by the Director*" or "The source may use an alternative control device *if the Director finds that* equivalent emissions reductions would be achieved." or "or other .... as approved by the Director." as in "The reference test method is EPA Method 5 or other method approved by the Director."	This type of provision is problematic and should not be included in the permit. EPA and citizens would have difficulty disputing a finding by the Director that the source had met the requirements of that condition. In the first example, even if the facility was *not* maintaining adequate records, the condition is drafted in such a way that the permitting authority's determination that the records *are* adequate could preclude EPA or citizen action. Similarly, in the second example, as long as the Director found that the source's alternative control device was achieving equivalent emissions reductions, EPA or citizens would find it difficult to take action against the source. Director's discretion would allow the source to negotiate a different test method "off permit" and bypass the process required for approval of alternative test methods. Other test methods could be acceptable but must be specifically identified in the permit.	When reviewing a title V condition that allows Director's discretion, • Check the underlying applicable requirement to see if it allows director's discretion. • Unless the underlying applicable requirement allows director's discretion (e.g. through SIP-approved rule), the language must be removed from the title V permit. • An acceptable alternative to Director's discretion language is to include specific options up front in the permit. Example: "The source may use an alternative control device that achieves an overall control efficiency of 99%." or "The reference test method is EPA Method 5 or Local Method 5 as approved by the Director on 12/15/93."

What Types of Conditions Affect Practical Enforceability?

Conditions Affecting Enforceability...	Why is it important?	What to Look for...
Start Up/Shut Down and Malfunction Language In addition to the emergency provisions of 70.6(g), permits will sometimes contain excess emissions provisions. These provisions may have been created in the permit, or may come from rules designed to give special treatment to sources that emit in excess of their limits because • the source is unable to comply with the emissions limit during startup and shutdown, or • process equipment or pollution control equipment breaks down. These rules are usually called "excess emissions rules" or "startup/shutdown rules."	If properly written, excess emission provisions only apply in situations where it is technologically impossible for the source to comply, or where circumstances beyond the source's control cause it to exceed its emissions limits. However, if EPA has not approved the provision, it is probably because the provision excuses emissions that should be under a source's control, or allows for Director's discretion. See the memo "Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions" in Appendix D for more information relating to how these provisions may apply in SIP rules.	When reviewing a title V permit that contains a condition that allows excess emissions, • Verify that any provisions for excess emissions are consistent with a federally promulgated standard or a standard that has been approved by EPA. If so, it is acceptable to include these in the permit. • If inconsistent with federal rules, the excess emissions language must be removed.
Proper Identification of Federally Enforceable Permit Terms Any term defined as an applicable requirement in §70.2 should be identified as federally enforceable (state and local rules may have been included in the definition of applicable requirement in the state/local program).	Sometimes federally enforceable permit terms are misidentified as being enforceable by the State only. See also discussion of State only requirements in the Applicable Requirements section.	When reviewing a provision identified as State-only • Make sure that the provision does not originate in a federally-enforceable applicable requirement. See also section on NSR/PSD applicable requirements for more information.

Language That May Indicate Practical Enforceability Problems....

Problem Language	Discussion	Correction
"Normally" as in "The permittee shall normally inspect the unit daily."	The term "normally" is subject to interpretation. Is a permittee still "normally" inspecting on a daily basis if inspections take place only 5 days out of 7? This language may place a burden on the permitting authority to show that the source's failure to inspect daily violated the requirement to "normally" inspect the unit daily.	Require that specific language be substituted for ambiguous language. Example: "The permittee shall inspect the unit daily." If necessary to allow for missed inspections, the permit could include a data recovery provision.
"as soon as possible; promptly" as in "The permittee shall take corrective action as soon as possible."	"As soon as possible" and "promptly" are open-ended. Without an outer limit defined in the permit, the burden may be on the permitting authority to prove that the source could or should have acted sooner.	Require that an outer time limit be set on any actions required to occur "as soon as possible" or "promptly." Example: The permittee shall take corrective action as soon as possible but no later than within 24 hours.
"Significant" as in "The permittee shall take corrective action if parameters are significantly out of range."	"Significant" must be defined for the permit to be enforceable. Otherwise, the burden may be on the permitting authority to show that a problem is significant.	Specify parameter levels or ranges which will trigger action. For example: "The permittee shall take corrective action if parameters are more than 10% out of the range defined in condition xx." Or "The permittee shall take corrective action if pressure drop is less than 15 inches for more than one hour."

Language That May Indicate Practical Enforceability Problems....

Problem Language	Discussion	Correction
"Should" or "may" as in " The permittee should inspect daily. The permittee may test monthly."	"Should" indicates a preference, rather than a requirement, and is not appropriate for permit conditions unless the underlying applicable requirement contains provisions that are not mandatory but are recommendations only. "May" indicates an option, rather than a requirement, and is not appropriate for permit conditions.	Require that all required permit terms use "shall" or "must." For example: "The permittee must inspect daily." or " The permittee shall test monthly."
"As suggested by the manufacturer's specifications" as in "The permittee shall maintain pressure drop as suggested by the manufacturer's specifications."	It is acceptable to use the manufacturer's recommendations as the basis for the numbers that go into the permit if there is no better data. However, the specific numbers must be incorporated into the permit rather than a reference to a document which may not include clear requirements.	Require that the specific numbers (which may be based on the manufacturer's recommendations) be included in the permit term. For example: "The permittee shall maintain pressure drop greater than 15 inches."
"Take reasonable precautions" as in "The permittee shall take reasonable precautions to reduce fugitive emissions."	"Reasonable precautions" may be too subjective to be practically enforceable. The permit must identify the minimum activities that constitute "reasonable precautions".	Require the permit to include the specific measures that must be taken. For example, "The permittee shall conduct monthly audits of the facility to assure that the minimum reasonable precautions for preventing fugitive emissions are implemented and shall maintain records in accordance with condition xx. For the purposes of this condition, reasonable precautions shall include but are not limited to the following: a. Storing and mixing volatile materials in covered containers; b. Storing all solvents or solvent containing cloth or other material used for surface preparation in closed containers;... ...[other specific conditions]."

Language That May Indicate Practical Enforceability Problems....

Problem Language	Discussion	Correction
"Use best engineering practices" as in "The permittee shall use best engineering practices to operate and maintain the boiler."	This is the same issue as "reasonable precautions". To be practically enforceable, "best engineering practices" must be defined/specified in the permit.	Require that the engineering practices be specified in the permit. For example: "The permittee shall use best engineering practices to operate and maintain the boiler which shall include but not be limited to servicing the boilers at least once each calendar year to assure proper combustion is occurring and that the units are in proper operating condition."

Conditions that Limit the Use of Credible Evidence

Since the publication of the Credible Evidence Rule on February 24, 1997 (62 FR 8314), and the Compliance Assurance Monitoring Rule on October 22, 1997 (62 FR 54899), EPA has become sensitive to language that could be construed to limit use of credible evidence. Data that is comparable to information generated by a reference method test (for example, CEMS data) could be considered credible evidence. Because any data comparable to the reference test method is credible, permit language limiting the type of data that can be used to establish compliance or a violation is unacceptable. Examples of **unacceptable language** include:

> "Compliance with the emissions limit shall be determined (or demonstrated) by test method X."
> "The permittee shall be deemed in compliance with the emissions limit if the results of an emissions test done in accordance with test method X are less than Y."

Other examples of unacceptable language are included in the following table.

It is beyond the authority of the permit writer to limit what evidence may be used to prove violations. (See 62 FR 54907-8, October 22, 1997) A permit may not be written in such a manner that it would interfere with the use of credible evidence.

When reviewing title V permit conditions that relate to determining compliance,

- Look for, and require the elimination of, any language that would bar the use of credible evidence.
- If the unacceptable language originates in an applicable requirement, flag the requirement for the permitting authority as one that must be addressed to allow for the use of credible evidence in their response to the 1994 credible evidence SIP call, which is still in effect.

Credible Evidence "Busting" Language that must be Deleted

Does the Permit Contain...	CE "Busting" Language to Look For
Language that specifies only certain types of data can be used to determine compliance?	• "The monitoring methods specified in this permit are the sole methods by which compliance with the associated limit is determined." • "Monitoring and reporting requirements are requirements that the permittee uses to determine compliance...." • "Compliance with this provision will be demonstrated by ....(insert periodic monitoring provisions) ..."

Credible Evidence "Busting" Language that must be Deleted

Does the Permit Contain...	CE "Busting" Language to Look For
Language that specifies certain types of data are more credible than others?	• "Reference test method results supersede parametric monitoring data." • "The EPA Reference Test Method results supersede CEMS data."
Language that excuses violations under certain conditions?	• "The permittee is considered to be in compliance if less than 5% of any CEMS monitored emission limit averaging periods exceeds the associated emission limit." • "If the permitting authority does not take action on an excess emissions demonstration by responding to the permittee in writing within 90 days of receipt, the permitting authority will be deemed to have made a determination that the excess emissions were unavoidable." • "Excess emissions that are unavoidable are not violations of permit terms." • "A 'deviation from permit requirements' shall not include any incidents whose duration is less than 24 hours from the time of discovery by the permittee."

The Following Information Appears in Appendix D :

- Credible Evidence Rule
- Memo on Start-up, Shut-down, Maintenance and Malfunctions
- Memo on Limiting Potential to Emit

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Bunge Milling, Inc.
Attn: James M. Lay
321 East North Street
Danville, Illinois 61832

Application No.: 03040020 I.D. No.: 183020ABT
Applicant's Designation: BAGHOUSE 201-20 Date Received: April 7, 2003
Subject: New Baghouse 201-20
Date Issued: May 8, 2003 Expiration Date: May 8, 2008
Location: 321 East North Streets, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of a new baghouse 201-20 to replace, in part, two existing baghouses (212-01 and 212-02) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit allows the Permittee to install the new baghouse 201-20 to replace two existing baghouses 212-01 and 212-02, to support the existing baghouse 201-01 in the control of material handling from the soybean preparation portion of the soybean extraction process (PEU-5).

2. This permit is issued based on installation of the new baghouse 201-20 not resulting in an increase in material throughput from the soybean extraction process (PEU-5).

3. All equipment in the soybean extraction process (PEU-5) is subject to 35 IAC 212.321(a), which provides that: no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c).[35 IAC 212.321(a)].

4. At all times, the Permittee shall to the extent practicable, maintain and operate the baghouse 201-20, in a manner consistent with good air pollution control practice for minimizing emissions.

5. Emissions of PM and PM_{10} from the new baghouse 201-20 shall not exceed 0.11 lb/hr and 0.47 tons/year and from the existing baghouse 201-01 shall not exceed 0.15 lb/hr and 0.67 tons/year. Total limits for these two filters of 0.26 lb/hr and 1.14 tons/year.

6a. Upon written request from the Illinois EPA, the Permittee shall at his own expense, conduct test for PM and PM_{10} emission and opacity in accordance with the applicable test methods and procedures as identified below.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter (PM)	USEPA Method 5
Particulate Matter (PM_{10})	USEPA Method 201A and 202
Opacity	USEPA Method 9

b. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.

c. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:

i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.

iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.

iv. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods.

v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.

d. Copies of the Final Reports(s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized. The Final Report shall include as a minimum:

i. A summary of results.

ii. General information.

iii. Description of test method(s), including description of sample points sampling train, analysis equipment, and test schedule.

iv. Detailed description of test conditions, including:

A. Process information, e.g., equipment feed rate.

B. Control equipment information, i.e., equipment condition and operating parameters during testing.

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

7a. The Permittee shall keep record of the amount of material being handled in the soybean extraction process (PEU-5).

b. The Permittee shall keep the following records related to emissions for the baghouses 201-20 and 201-01 controlling the material handling from the soybean extraction process (PEU-5).

i. The Permittee shall keep an inspection and maintenance log for the baghouses 201-20 and 201-01.

ii. An estimate of excess PM and PM_{10} emissions from each incident when a unit served by baghouses 201-20 and 201-01 operated so as to be unable to comply with the limits required in this permit;

iii. Total annual PM and PM_{10} emission of the units served by baghouses 201-20 and 201-01 based on operating information and applicable emission factors and formulas with supporting calculations.

8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

9. If there is an exceedance of the requirements of this permit as determined by the records required by this permit or by other means, the Permittee shall submit a report to the Illinois EPA's within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

10. Two copies of required reports and notifications concerning emissions equipment operation or performance testing shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
Telephone: 217/782-5811 Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
Telephone: 618/346-5120 Facsimile: 618/346-5155

The Permittee should update their CAAPP application to include changes at the source due to installation of new baghouse 201-20 by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information to accomplish this.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RNG:jar

cc: Region 3

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

P.O. BOX 19506, SPRINGFIELD, ILLINOIS 62794-9506

RENEE CIPRIANO, DIRECTOR

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

Bunge Milling, Inc.
Attn: Mickey Lay, Site Director
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: February 7, 1996
Operation of: Corn and Soybean Processing
Date Issued: November 24, 2003 Expiration Date[2]: November 24, 2008
Source Location: 321 East North Street, Danville, Vermillion, IL 61832
Responsible Official: Fred Luckey/ Sr. Vice President, General Manager

This permit is hereby granted to the above-designated Permittee to operate a facility that processes corn and soybeans, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact LeeAnne Kinsella at 217/782-2113.

COPY
Original Signed by
Donald E. Sutton, P.E.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control
DES:LAK:psj

cc: Illinois EPA, FOS, Region 3
USEPA

[1] This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

[2] Except as provided in Condition 8.7 of this permit.

IEPA-DIVISION OF RECORDS MANAGEMENT
RELEASABLE

JUL 15 2014

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1.0 SOURCE IDENTIFICATION

1.1 Source

Bunge Milling, Inc.
321 East North Street
Danville, Illinois 61832
217/442-1800 Ext. 784

I.D. No.: 183020ABT
Standard Industrial Classification: 2075, Soybean Oil Mills
2041, Flour & Other Grain Mill Products

1.2 Owner/Parent Company

Bunge Milling, Inc.
321 East North Street
Danville, Illinois 61832

1.3 Operator

Bunge Milling, Inc.
321 East North Street
Danville, Illinois 61832

Mickey Lay, Site Director
217/442-1800 Ext. 784

1.4 General Source Description

Bunge Milling, Inc. is located at 321 East North Street, Danville, Illinois. The source owns and operates a corn and soybean processing facility, which produces corn and soybean oil and corn and soybean meal and other products.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
F	degrees Fahrenheit
gal	gallon
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
K	degrees Kelvin
kpa	kilopascals
kg	kilogram
kW	kilowatts
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
Mg	Megagram
mmBtu	Million British thermal units
mo	month
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
psia	pounds per square inch absolute
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO_2	Sulfur Dioxide
T	Ton

T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
yr	year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

- Sulfuric Acid Tank

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

- Welding as Part of Maintenance
- Bleach Tank

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from

natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Printing operations with aggregate organic solvent usage that never exceeds 750 gallons per year from all printing lines at the source, including organic solvent from inks, dilutents, fountain solutions, and cleaning materials [35 IAC 201.210(a)(14)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a)and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):			
5012-0001-0016	TRUCK DUMP #1	Pre 1978	APM 40072.10
5012-0002-0012	NORTH ST TRUCK DUMP #2	Pre 1970	DD 484RF12
5012-0007-0015	SCTN D & E TRANS GEN ASP	Pre 1978	APM 40192.10
5012-0010-0054	HOFFMAN BLDG 301 VAC	Pre 1970	HOFFMAN 48X96
5012-0005-0029	WEST HDHS TRANS GEN ASP	Pre 1978	DD 484RF12
5012-0003-0013	RHOMBO TRUCK DUMP #3	1973	APM SJL156-6
5012-0004-0016	RAIL DUMP	Pre 1978	APM 41120.12
5012-0009-0009	RHOMBO WEST GEN ASP	1973	APM SJL72-6
5012-0003-0018	RHOMBO GALLERY GEN ASP	1973	APM SJL72-6
5012-0010-0047	TRACK 6 VACUUM	Pre 1970	HOFFMAN 48X96
4870-0013-0015	CLEANINGS DISCHARGE	Pre 1978	BUHLER 16S-6-30
4750-0029-0015	CONVEYING GEN ASP	Pre 1970	MICROPUL 100S-6-20
4750-0038-0003	E-W DRYER	1991	DUCON MICROPUL CYCLONE 890/810/13585.5
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):			
4870-0013-0001	CLEANING NORTH APM	1996	APM 41216.12
4880-0034-0069	CORN CLEANING BLDG 115 #2	1996	TD 484RF12
Dry Corn Milling, Processing and Products Handling:			
4870-0010-0055	BEMIS BAGGING	1996	APM 16019.8
4870-0010-0030	BAGGING GEN ASP	1996	APM 40020.8
4870-0013-0019	BAGGING PACKER GEN ASP	1996	APM 14042.8
4880-0042-0057	BRAN DRYER PROCESS	1996	APM 14036.8
5012-0005-0021	TRUCK DUMP #4 & W. GAL GEN ASP	1985	DD 484RF12
4880-0042-0062	BRAN SIFTER PROCESS	1996	APM 10144.8

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4880-0034-0054	EAST MEAL DRY/COOL	1996	APM 40120.10
4880-0034-0059	WEST MEAL DRY	1996	APM 40144.8
4880-0034-0035	S APM BINNING	1996	APM 41144.12
4880-0034-0027	8TH FR DRACCO SCREENING	1996	DRACO 6MB-60
4880-0034-0001	9TH FR DRACCO SCREENING	1996	DRACO 8MB-72
4880-0032-0052	BLDG 105 VACUUM	1996	HOFFMAN 36X96
4870-0021-0001	BULK LOADING WHITE GOODS	1996	DD 484RF12
4870-0015-0016	BLDG 104 VACUUM	1996	HOFFMAN 38405A
4880-0042-0054	BRAN BIN	1996	BUHLER 16S-6-30
4880-0008-0028	6TH FLR SCREENING	1996	WIEDENMANN 2X4 LF150-1200
4880-0008-0040	W 4TH FLR GRAVITY TABLES	1996	WIEDENMANN 2X5 LF225-2250
4880-0034-0010	S LUNCHROOM SCREENING	1996	CD 484RF12
4880-0034-0042	S CD SCREENING	1996	CD 484RF12
4880-0034-0048	N CD GEN ASPIRATION	1996	CD 484RF12
4880-0034-0019	N LUNCHROOM SCREENING	1996	CD 484RF12
4870-0013-0024	PACK & BULK LOAD BLDG 115 #1	1996	TD 484RF12
4880-0034-0077	CAMAS/BRAN BLDG 115 #3	1996	TD 484RF12
4880-0034-0071	THRU/TAIL STOCK DRYERS BLDG 115 #4	1996	TD 484RF12
4880-0032-0070	BLDG 115 VACUUM	1996	HOFFMAN 554002
4870-0005-0003	TRACK 2 UNLOADING SEC REC	1996	USS INC. 15CF P/D
4870-0009-0005	GERM FILTER	Pre 1970	4880-0009-0005
4932-0001-0001	LAB FILTER	Pre 1970	APM 14106.4
4900-0003-0039	AB FIN PROD SURGE NORTH	1996	MICROPUL 8B
4900-0003-0045	AB FIN PROD SURGE SOUTH	1996	MICROPUL 8B

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4990-0005-0012	1/2 PULVOCRON MEAL REC	1996	BUHLER 9-6-100
4990-0005-0042	1/2 PULVOCRON VISC FLOUR REC	1996	BUHLER 16-8-100
4990-0002-0010	3/4 PULVOCRON MEAL REC	1996	BUHLER 9-6-100
4990-0004-0013	9/10 PULV MEAL SEC REC	1996	BUHLER 16009.4
4990-0003-0010	7/8 PULV MEAL SEC REC	1996	BUHLER 16009.4
4990-0002-0019	#3 PULVOCRON	1996	BUHLER 37-8-220
4990-0002-0022	#4 PULVOCRON	1996	BUHLER 37-8-220
4900-0001-0039	#5 PULVOCRON	1996	BUHLER 37-8-220
4990-0005-0021	#1 PULVOCRON	1996	BUHLER 37-8-220
4990-0005-0024	#2 PULVOCRON	1996	BUHLER 37-8-220
4990-0003-0019	#7 PULVOCRON	1996	APM 16022.8
4990-0003-0022	#8 PULVOCRON	1996	APM 16022.8
4990-0004-0022	#9 PULVOCRON	1996	APM 16022.8
4990-0004-0025	#10 PULVOCRON	1996	APM 16022.8
4990-0002-0008	3/4 PULV GRINDER SURGE	1996	MICROPUL 2 1/2B
4990-0005-0010	1/2 PULV GRINDER SURGE	1996	MICROPUL 2 1/2B
4990-0004-0011	9/10 PULV GRINDER SURGE	1996	APM 16104.4
4990-0003-0008	7/8 PULV GRINDER SURGE	1996	APM 16104.4
4990-0005-0028	1/2 FLOUR SURGE BIN	1996	MICROPUL 2 1/2B
4990-0002-0026	3/4 FLOUR SURGE BIN	1996	MICROPUL 2 1/2B
4990-0003-0026	7/8 FLOUR SURGE BIN	1996	APM 16104.4
4990-0004-0029	9/10 FLOUR SURGE BIN	1996	APM 16104.4
4990-0006-0024	HIBOND VISC FLAKE ROLLER MILL	1996	APM 15066.8
4820-0001-0029	CSM BLENDED FOOD REC	1996	APM 40070.7

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4820-0001-0052	BLENDED FOOD PACK	1996	APM 16150.6
4900-0001-0068	ALLBOND VISC FLOUR GEN ASP	1996	BUHLER 16-8-100
4820-0003-0007	MILK BINS	1996	MICROPUL 6B
4990-0007-0049	300 SERIES BINNING	1996	MICROPUL 1F1
4990-0001-0002	SOY MEAL GEN ASP	1996	APM 16022.4
4990-0001-0006	SOY MEAL SURGE	1996	MICROPUL 6B
4990-0001-0025	MEAL BIN COOLER	1996	APM 400072.10
4990-0002-0043	3/4 SOY FLOUR REC	1996	APM16014.8
4820-0003-0072	TRI CAL BINS	1996	APM 16009.8
4990-0001-0058	5/6 ALLOND REC	1996	4900-0001-0058
4990-0003-0032	7/8 SOY FLOUR REC	1996	APM 16014.8
4990-0002-0033	BIN 308	1996	MICROPUL 6B
4820-0002-0072	BIN 509	1996	MICROPUL 6B
4820-0002-0068	BIN 508	1996	MICROPUL 6B
4820-0003-0038	BIN 310	1996	MICROPUL 6B
4990-0002-0036	BIN 309	1996	MICROPUL 6B
4990-0004-0037	9/10 PULVICRON REC	1996	BUHLER 16-6-220
4820-0002-0038	MILK BINS	1996	MICROPUL 21-6-220
4820-0002-0035	MILK BIN BAG DUMP	1996	APM 14048.6
4990-0007-0029	BLENDING BATCH BIN GEN ASP	1996	BUHLER 25S-6-30
4990-0007-0036	BLENDER GEN ASP	1996	BUHLER 16S-6-30
4990-0007-0032	BLENDING GEN ASP	1996	MICROPUL 36S-8-30
4820-0003-0063	CSB BINNING GEN ASP	1996	BUHLER 64S-6-20
4820-0003-0059	CSB BINNING GEN ASP	1996	BUHLER 64S-6-20

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4990-0006-0040	GEN ASPIRATION	1996	BUHLER 9-8-220
4900-0001-0091	#5 SL GEN ASP & #5 EXPANDER	1996	APM 14024.6
4990-0011-0001	FIBER REC GEN ASP	1996	BUHLER 9-8-220
4820-0002-0011	PCM ASPIRATION FILTER	1996	MICROPUL 1F1
4870-0010-0005	CF BRAN PACKING BINNING	1996	MICROPUL 25-8-220
4900-0005-0035	BLDG 111 VACUUM	1996	HOFFMAN 60X120
4870-0006-0006	110/210 REC GEN ASP	1996	APM 16030.4
4990-0011-0029	FIBER REC GEN ASP	1996	APM 16019.4
4990-0001-0029	COOLING TOWER	1996	APM 40072.10
4820-0003-0022	INGREDIENT BIN 601	1996	MICROPUL 4B
4820-0003-0026	INGREDIENT BIN 602	1996	MICROPUL 4B
4820-0003-0030	INGREDIENT BIN 603	1996	MICROPUL 2 1/2 B
4820-0003-0034	INGREDIENT BIN 604	1996	APM 15105.4
4820-0003-0018	MICRO INGR DUMP FILTER	1996	APM 15105.4
4820-0003-0004	MIXER GEN ASP	1996	BUHLER 25S-6-30
4900-0001-0065	3/4 HAMMERMILL	1996	APM 16009.6
4900-0001-0006	#3 & #4 EXPANDERS	1996	APM 16009.6
4900-0005-0001	REPROCESS GEN CD ROOF	1996	CD 376RF10
4900-0001-0042	#6 PULV GRINDER	1996	BUHLER 37-8-220
4900-0001-0046	5/6 PULV AB FIN PROD SURGE BIN	1996	MICROPUL 4B
4900-0002-0032	PELLET BINS	1996	BUHLER 16S-6-30
4900-0003-0017	#1 PCM GRIND	1996	APM 16022.8
4900-0003-0020	#2 PCM GRIND	1996	APM 16022.8
4900-0003-0023	#3 PCM GRIND	1996	APM 16022.8

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4900-0003-0026	#4 PCM GRIND	1996	APM 16022.8
4900-0003-0029	#5 PCM GRIND	1996	APM 16022.8
4990-0006-0027	VISCOSITY FLOUR REC	1996	APM 16022.8
4990-0011-0010	COND RECEIVER/SOY MEAL GRIND	1996	APM 16014.8
4900-0005-0007	GRIND REJECT/SCRAP BIN	1996	MICROPUL 2 1/2B
4900-0005-0029	BLDG 112 VACUUM	1996	HOFFMAN 36X96
4900-0005-0006	N DAY GEN ASP & #5 EXPANDER	1996	CD 484RF12
4820-0001-0093	BLENDED FOODS FILTER	1996	DD 124RF10
4900-0001-0030	AB GRINDING SURGE BIN	1996	BUHLER 37-8-220
4912-0002-0054	HOMINY TRUCK LDOUT ASP	Pre 1970	DD 484RF12
4860-0018-0007	N HOMINY FEED	1982	MICROPUL 1F2
4860-0018-0003	S HOMINY FEED	Pre 1970	MICROPUL 1F2
4860-0019-0003	FTS DRYER ASPIRATION	Pre 1970	DAY CYCLONE HV60
4860-0022-0017	SEC CLEAN GRINDING	Pre 1970	APM 15030.8
4860-0024-0003	#1 FTS BRAN DRYER	Pre 1970	CORONA 15 CYCLONE
4912-0006-0017	TRACK 16 BULK RAIL LDOUT	1982	WEIDENMAN LFT 2X7
4860-0017-0073	FLAKING GEN ASP	Pre 1970	APM 40120.8
4860-0017-0003	GERM DRYER	Pre 1970	DAY CYCLONE HV56
4860-0017-0072	GERM ROLLS ASPIRATION	Pre 1970	DAY CYCLONE HV56
4860-0017-0026	BIN 945 GERM RECEIVER	Pre 1970	BUHLER 36S-6-30
4860-0023-0001	GERM DUSTERS ASP	Pre 1970	APM 40120.8
4860-0024-0037	PET BRAN KICE LITES FILTER	1995	MICROPUL 36S-6-30
Corn Oil Solvent Extraction:			
4861-0003-0018	CORN MEAL DC PLANT #2	1982	MAC CYCLONE HV90

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4861-0006-0005	CORN EXTRACTOR, DT 7 DISTILLATION	1983	MIN OIL ABSORBER
Soybean Preparation:			
4750-0036-0001	E-W BEAN CLEAN/DEHULL	1991	484RF12
4750-0029-0074	HULLS GENERAL ASPIRATION	Pre 1970	DD 276RFW12
4750-0029-0042	6th FLOOR GEN ASP	Pre 1970	MICROPUL 100S-6-20
4750-0017-0043	CONDITIONER	1982	DAY CYCLONE HV51
4750-0017-0044	CONDITIONER	1982	DAY CYCLONE HV51
4750-0018-0043	FLAKER ASPIRATION	1982	DAY CYCLONE HV74
Soybean Oil Solvent Extraction:			
4750-0002-0018	MEAL DRY & COOL CYCLONE #1	1988	DAY CYCLONE HV90
4750-0002-0020	MEAL DRY & COOL CYCLONE #2	1988	DAY CYCLONE HV90
4750-0002-0022	MEAL DRY & COOL CYCLONE #3	1988	DAY CYCLONE HV90
4750-0002-0024	MEAL DRY & COOL CYCLONE #4	1988	DAY CYCLONE HV90
4750-0007-0004	SOY EXTRACTOR, DT & DISTLLATION	1983	MIN OIL ABSORBER
Soybean Products Milling and Handling:			
4750-0029-0032	MEAL BINNING	Pre 1970	APM 40240.8
4750-0029-0045	MEAL SCREENER GEN ASP	Pre 1970	MICROPUL 100S-6-20
4750-0029-0001	MEAL GRIND GEN ASP	Pre 1970	APM 40224.4
4750-0023-0017	KAOLIN/CALCIUM BIN REC	Pre 1970	APM 16050.8
4912-0008-0006	BLDG 201/202 VACUUM	Pre 1970	HOFFMAN 36X96
4912-0009-0005	BLDG 208 VACUUM	Pre 1970	HOFFMAN 36X96
4750-0029-0027	ROUND BIN GEN ASP	Pre 1970	APM 14072.6
4912-0004-0022	TRUCK MEAL LOADOUT	1980	376RF8
4912-0003-0011	RAIL MEAL LOADOUT #1	1981	376RF12
4750-0033-0001	LTMS & RAIL MEAL TRANSFER	1985	376RF8

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4750-0033-0011	LTMS & RAIL MEAL LOADOUT	1985	MAC 144MCF416
4750-0025-0015	HULL PELLET COOLER	1997	MAC Cyclone HV39
Cogen Plant: Boilers, Emergency Generator and Associated Equipment			
FM-26	F&M PACKAGE BOILER	1986	LOW NO_x Burner
CFB BOILER	CFB FLUIDIZED BED BOILER	1986	FULLER 6M304TA 14.25 & NO_x Red
F-108	COAL RECEIVING & HANDLING	1986	Fugitives
CP-108	REINJECTION BIN	1986	MAC 97-2861-6C-100
CP-104	COAL BUNKER	1986	FLEX KLEEN 58 BVBS 16IIG
CP-105	LIMESTONE SILO	1986	FLEX KLEEN 58 BVBS 16IIG
CP-103	COAL SILO	1986	FLEX KLEEN 58BVBS 36IIG
CP-101	FLY ASH SILO	1986	FLEX KLEEN 100 CTBC 54 IIIG
CP-104A	SYSTEM C STORAGE	1986	SMOOT 84BV16
Storage Tanks			
4750-0011-0001	VEGETABLE OIL TANK #2 (300,809)	1953	None
4750-0011-0002	VEGETABLE OIL TANK #3 (1,381,843)	1953	None
4750-0011-0003	VEGETABLE OIL TANK #4 (1,586,300)	1953	None
4750-0011-0004	VEGETABLE OIL TANK #5 (1,586,300)	1953	None
4750-0011-0005	VEGETABLE OIL TANK #7 (950,000)	1973	None
4750-0011-0006	VEGETABLE OIL TANK #8 (2,641,778)	1974	None
4750-0011-0007	VEGETABLE OIL TANK #9 (2,518,619)	1974	None
4750-0011-0008	VEGETABLE OIL TANK #10 (4,018,627)	1974	None
4750-0011-0009	VEGETABLE OIL TANK #11 (5,510,631)	1974	None
4750-0005-0005	#4A HEXANE STORAGE TANK (46,000)	1973	Vented to Main Absorber Vents-Closed Loop
4861-0001-0006	#1 HEXANE STORAGE TANK (14,930)	1953	Vented to Main Absorber Vents-Closed Loop
4861-0001-0007	#2 HEXANE STORAGE TANK (14,930)	1953	Vented to Main Absorber Vents-Closed Loop

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4861-0001-0008	#3 HEXANE STORAGE TANK (IDLE) (14,930)	1953	Vented to Main Absorber Vents-Closed Loop
4861-0014-0002	VEGETABLE OIL TANK #6 (498,215)	1973	None
4750-0054-0017	#7 HEXANE STORAGE TANK (30,662)	1973	Vented to Main Absorber Vents-Closed Loop
4750-0054-0015	#5 HEXANE STORAGE TANK (30,662)	1973	Vented to Main Absorber Vents-Closed Loop
4750-0054-0016	#6 HEXANE STORAGE TANK (30,662)	1973	Vented to Main Absorber Vents-Closed Loop
L-OIL-3	GAS STORAGE TANK (350)	Unknown	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit because the source is subject to a standard, limitation, or other requirement under Section 111 (NSPS) or Section 112 (HAPs) of the CAA for which USEPA requires a CAAPP permit, or because the source is in a source category designated by the USEPA, pursuant to 40 CFR 70.3(a)(2), (3), and (5) (40 CFR 70.3 Applicability) [Section 39.5(2)(a)(ii) and (iv) of the Act].

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.5 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall

maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.

c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

i. Illinois EPA, Compliance Section; and

ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or

iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	1,871.6
Sulfur Dioxide (SO_2)	1,264.9
Particulate Matter (PM)	187.7
Nitrogen Oxides (NO_x)	183.2
HAP, not included in VOM or PM	109.9
Total	3,617.3

5.5.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.5.3 Other Source-Wide Emission Limitations

a. The annual emissions from the source shall not exceed the limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

b. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA,

specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Recordkeeping Requirements for the NESHAP for Solvent Extraction for Vegetable Oil Production

The source is subject to the recordkeeping requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

5.6.3 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.6.4 Records for HAP Emissions

a. Emissions of HAPs, ton/mo and ton/yr.

5.6.5 Records for Operating Scenarios

N/A

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.7.3 Annual Reporting of HAP Emissions

The Permittee shall submit an annual report to the Illinois EPA, Compliance Section, on HAP emissions from the source, including the following information. The source is being operated as a major source of HAP emissions. This report shall be submitted with the Annual Emissions Report (Condition 9.7).

a. The annual emissions of individual HAPs for each month of the previous calendar year, tons/year (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all); and

b. The total emissions of all HAPs combined for each month of the previous calendar year, tons/year (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all).

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)

7.1.1 Description

The corn and soybeans are received at the Danville facility by rail and truck. Corn, soybeans and other products are conveyed and stored in storage tanks. All overland transfer in the system is by covered belt or enclosed conveyors. From storage the grain is conveyed to the process lines where it may be weighed, screened, cleaned, tempered and/or dried.
The dryer uses steam, so the pollutants from gas combustion are not present.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
5012-0001-0016	TRUCK DUMP #1	APM 40072.10
5012-0002-0012	NORTH ST TRUCK DUMP #2	DD 484RF12
5012-0007-0015	SCTN D & E TRANS GEN ASP	APM 40192.10
5012-0010-0054	HOFFMAN BLDG 301 VAC	HOFFMAN 48X96
5012-0005-0029	WEST HDHS TRANS GEN ASP	DD 484RF12
5012-0003-0013	RHOMBO TRUCK DUMP #3	APM SJL156-6
5012-0004-0016	RAIL DUMP	APM 41120.12
5012-0009-0009	RHOMBO WEST GEN ASP	APM SJL72-6
5012-0003-0018	RHOMBO GALLERY GEN ASP	APM SJL72-6
5012-0010-0047	TRACK 6 VACUUM	HOFFMAN 48X96
4870-0013-0015	CLEANINGS DISCHARGE	BUHLER 16S-6-30
4750-0029-0015	CONVEYING GEN ASP	MICROPUL 100S-6-20
4750-0038-0003	E-W DRYER	DUCON MICROPUL CYCLONE 890/810/135 85.5

7.1.3 Applicability Provisions and Applicable Regulations

a. The receiving and storage units for the purpose of these unit-specific conditions, are an "affected grain handling operation" described in Conditions 7.1.1 and 7.1.2.

b. The affected grain handling operation is subject to the emission limits identified in Condition 5.2.2.

c. The affected grain handling operation is subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.1.4 Non-Applicability of Regulations of Concern

a. 35 IAC 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space [35 IAC 212.461(a)].

b. The affected grain handling operation is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, and 35 IAC 212.464, Agriculture Sources in Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

7.1.5 Operational and Production Limits and Work Practices

a. The Permittee shall follow good operating practices for the control equipment including periodic inspection, routine maintenance and prompt repair of defects.

b. The affected grain handling operation is subject to the applicable operational and production limits and work practices requirements in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.1.6 Emission Limitations

a. The affected grain handling operation is subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

b. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.1.7 Testing Requirements

a. The affected grain handling operation is subject to the applicable testing requirements established in 35 IAC Part 212 Subpart A: General Provisions for Particulate Matter Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected grain handling operation is subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected grain handling operation to demonstrate compliance with Conditions 5.5.1, 7.1.3, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

a. The affected grain handling operation is subject to the applicable recordkeeping requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected grain handling operation is subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which

have been attached hereto and incorporated herein by reference (see Attachment 4).

c. Records addressing use of good operating practices for the control equipment:

i. Records for periodic inspection of the control equipment with date, individual performing the inspection, and nature of inspection; and

ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

d. Records addressing the affected grain handling operation and bug insecticide process emissions shall be maintained, with supporting calculations, as determined by Condition 7.1.12 to demonstrate compliance to Conditions 5.5.2 and 7.1.6.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected grain handling operation with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The affected grain handling operation is subject to the applicable reporting requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected grain handling operation is subject to the applicable reporting requirements established in State Construction and Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

c. Emissions from or operation of an affected grain handling operation in excess of the limits specified in Conditions 7.1.3, 7.1.5, and 7.1.6 within 30 days of such occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

a. To determine compliance with Conditions 5.5.1 and 7.1.6, PM emissions from the affected grain handling operation shall be calculated based on:

i. The applicable emission factors for grain elevators and grain processing, Tables 9.9.1-1 and 9.9.1-2, AP-42, Volume I, Fifth Edition, Supplement D, April 2003, or current edition, or

ii. The results of emission test(s) on the affected process or a similar process. The emission test(s) shall be the most recent, valid and deemed acceptable to the Agency.

7.2 Corn, Soybean and Products Receiving, Cleaning and Storage (NSPS)

7.2.1 Description

The corn and soybeans are received at the Danville facility by rail and truck. Corn, soybeans and other products are conveyed and stored in storage tanks. All transfer in the system is by covered belt or enclosed conveyors. From storage the grain is conveyed to the process lines where it may be weighed, screened, cleaned, tempered and/or dried.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4870-0013-0001	CLEANING NORTH APM	APM 41216.12
4880-0034-0069	CORN CLEANING BLDG 115 #2	TD 484RF12
5012-0005-0021	TRUCK DUMP #4 & W. GAL GEN ASP	DD 484RF12

7.2.3 Applicability Provisions and Applicable Regulations

a. The emission units for the purpose of these unit-specific conditions are an "affected grain handling operation" described in Conditions 7.2.1 and 7.2.2.

b. The affected grain handling operation is subject to the emission limits identified in Condition 5.2.2.

c. The equipment associated with the affected grain handling operation are subject to the NSPS, 40 CFR 60 Subparts A: General Provisions and NSPS, 40 CFR 60 Subpart DD: Standards of Performance for Grain Elevators, because the equipment associated with the affected grain handling operation was constructed, modified, or commenced reconstruction after August 3, 1978. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 2).

d. The affected grain handling operation is subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.2.4 Non-Applicability of Regulations of Concern

a. 35 IAC 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space [35 IAC 212.461(a)].

b. The affected grain handling operation is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, and 35 IAC 212.464, Agriculture Sources in Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

7.2.5 Operational and Production Limits and Work Practices

a. The Permittee shall follow good operating practices for the control equipment including periodic inspection, routine maintenance and prompt repair of defects.

b. The affected grain handling operation is subject to the applicable operational and production limits and work practices requirements in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.2.6 Emission Limitations

a. The equipment associated with the affected grain handling operation are subject to the emission limitations established in NSPS, 40 CFR 60 Subparts A: General Provisions and NSPS, 40 CFR 60 Subpart DD: Standards of Performance for Grain Elevators, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected grain handling operation is subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

c. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA,

specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.2.7 Testing Requirements

a. The equipment associated with the affected grain handling operation are subject to the testing requirements established in NSPS, 40 CFR 60 Subparts A: General Provisions and NSPS, 40 CFR 60 Subpart DD: Standards of Performance for Grain Elevators, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected grain handling operation is subject to the applicable testing requirements established in 35 IAC Part 212 Subpart A: General Provisions for Particulate Matter Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected grain handling operation is subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected grain handling operation to demonstrate compliance with Conditions 5.5.1, 7.2.3, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

a. The affected grain handling operation is subject to the applicable recordkeeping requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).

b. The equipment associated with the affected grain handling operation are subject to the recordkeeping requirements established in NSPS, 40 CFR 60 Subparts

A: General Provisions and NSPS, 40 CFR 60 Subpart DD: Standards of Performance for Grain Elevators, which have been attached hereto and incorporated herein by reference (see Attachment 2).

c. The affected grain handling operation is subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

d. Records addressing use of good operating practices for the control equipment:

i. Records for periodic inspection of the control equipment with date, individual performing the inspection, and nature of inspection; and

ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

e. Records addressing the affected grain handling operation emissions shall be maintained, with supporting calculations, as determined by Condition 7.2.12 to demonstrate compliance to Conditions 5.5.2 and 7.2.6.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected grain handling operation with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The equipment associated with the affected grain handling operation are subject to the reporting requirements established in NSPS, 40 CFR 60 Subparts A: General Provisions and NSPS, 40 CFR 60 Subpart DD: Standards of Performance for Grain Elevators, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected grain handling operation is subject to the applicable reporting requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected grain handling operation is subject to the applicable reporting requirements established in State Construction and Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

d. Emissions from or operation of an affected grain handling operation in excess of the limits specified in Conditions 7.2.3, 7.2.5, and 7.2.6 within 30 days of such occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

a. To determine compliance with Conditions 5.5.1 and 7.2.6, PM emissions from the affected grain handling operation shall be calculated based on:

i. The applicable emission factors for grain elevators and grain processing, Tables 9.9.1-1 and 9.9.1-2, AP-42, Volume I, Fifth Edition, Supplement D, April, 2003, or current edition, or

ii. The results of emission test(s) on the affected process or a similar process. The emission test(s) shall be the most recent, valid and deemed acceptable to the Agency.

7.3 Dry Corn Milling, Processing and Products Handling

7.3.1 Description

The milling plant performs two functions. One is to separate a kernel of corn into three components, which are germ, bran and meal. The second function is to process the bran and meal to make finished product, while the germ is sent to the extraction plant for oil extraction. Once the product is made, it is either packaged or loaded into truck or rail car.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4870-0010-0055	BEMIS BAGGING	APM 16019.8
4870-0010-0030	BAGGING GEN ASP	APM 40020.8
4870-0013-0019	BAGGING PACKER GEN ASP	APM 14042.8
4880-0042-0057	BRAN DRYER PROCESS	APM 14036.8
4880-0042-0062	BRAN SIFTER PROCESS	APM 10144.8
4880-0034-0054	EAST MEAL DRY/COOL	APM 40120.10
4880-0034-0059	WEST MEAL DRY	APM 40144.8
4880-0034-0035	S APM BINNING	APM 41144.12
4880-0034-0027	8TH FR DRACCO SCREENING	DRACO 6MB-60
4880-0034-0001	9TH FR DRACCO SCREENING	DRACO 8MB-72
4880-0032-0052	BLDG 105 VACUUM	HOFFMAN 36X96
4870-0021-0001	BULK LOADING WHITE GOODS	DD 484RF12
4870-0015-0016	BLDG 104 VACUUM	HOFFMAN 38405A
4880-0042-0054	BRAN BIN	BUHLER 16S-6-30
4880-0008-0028	6TH FLR SCREENING	WIEDENMANN 2X4 LF150-1200
4880-0008-0040	W 4TH FLR GRAVITY TABLES	WIEDENMANN 2X5 LF225-2250
4880-0034-0010	S LUNCHROOM SCREENING	CD 484RF12

Emission Units (Plant ID/ State ID)	Description	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4880-0034-0042	S CD SCREENING	CD 484RF12
4880-0034-0048	N CD GEN ASPIRATION	CD 484RF12
4880-0034-0019	N LUNCHROOM SCREENING	CD 484RF12
4870-0013-0024	PACK & BULK LOAD BLDG 115 #1	TD 484RF12
4880-0034-0077	CAMAS/BRAN BLDG 115 #3	TD 484RF12
4880-0034-0071	THRU/TAIL STOCK DRYERS BLDG 115 #4	TD 484RF12
4880-0032-0070	BLDG 115 VACUUM	HOFFMAN S54002
4870-0005-0003	TRACK 2 UNLOADING SEC REC	USS INC. 15CF P/D
4870-0009-0005	GERM FILTER	4880-0009-0005
4932-0001-0001	LAB FILTER	APM 14106.4
4900-0003-0039	AB FIN PROD SURGE NORTH	MICROPUL 8B
4900-0003-0045	AB FIN PROD SURGE SOUTH	MICROPUL 8B
4990-0005-0012	1/2 PULVOCRON MEAL REC	BUHLER 9-6-100
4990-0005-0042	1/2 PULVOCRON VISC FLOUR REC	BUHLER 16-8-100
4990-0002-0010	3/4 PULVOCRON MEAL REC	BUHLER 9-6-100
4990-0004-0013	9/10 PULV MEAL SEC REC	BUHLER 16009.4
4990-0003-0010	7/8 PULV MEAL SEC REC	BUHLER 16009.4
4990-0002-0019	#3 PULVOCRON	BUHLER 37-8-220
4990-0002-0022	#4 PULVOCRON	BUHLER 37-8-220
4900-0001-0039	#5 PULVOCRON	BUHLER 37-8-220
4990-0005-0021	#1 PULVOCRON	BUHLER 37-8-220
4990-0005-0024	#2 PULVOCRON	BUHLER 37-8-220
4990-0003-0019	#7 PULVOCRON	APM 16022.8

Emission Units (Plant ID/ State ID)	Description	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4990-0003-0022	#8 PULVOCRON	APM 16022.8
4990-0004-0022	#9 PULVOCRON	APM 16022.8
4990-0004-0025	#10 PULVOCRON	APM 16022.8
4990-0002-0008	3/4 PULV GRINDER SURGE	MICROPUL 2 1/2B
4990-0005-0010	1/2 PULV GRINDER SURGE	MICROPUL 2 1/2B
4990-0004-0011	9/10 PULV GRINDER SURGE	APM 16104.4
4990-0003-0008	7/8 PULV GRINDER SURGE	APM 16104.4
4990-0005-0028	1/2 FLOUR SURGE BIN	MICROPUL 2 1/2B
4990-0002-0026	3/4 FLOUR SURGE BIN	MICROPUL 2 1/2B
4990-0003-0026	7/8 FLOUR SURGE BIN	APM 16104.4
4990-0004-0029	9/10 FLOUR SURGE BIN	APM 16104.4
4990-0006-0024	HIBOND VISC FLAKE ROLLER MILL	APM 15066.8
4820-0001-0029	CSM BLENDED FOOD REC	APM 40070.7
4820-0001-0052	BLENDED FOOD PACK	APM 16150.6
4900-0001-0068	ALLBOND VISC FLOUR GEN ASP	BUHLER 16-8-100
4820-0003-0007	MILK BINS	MICROPUL 6B
4990-0007-0049	300 SERIES BINNING	MICROPUL 1F1
4990-0001-0002	SOY MEAL GEN ASP	APM 16022.4
4990-0001-0006	SOY MEAL SURGE	MICROPUL 6B
4990-0001-0025	MEAL BIN COOLER	APM 400072.10
4990-0002-0043	3/4 SOY FLOUR REC	APM16014.8
4820-0003-0072	TRI CAL BINS	APM 16009.8
4990-0001-0058	5/6 ALLOND REC	4900-0001-0058

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4990-0003-0032	7/8 SOY FLOUR REC	APM 16014.8
4990-0002-0033	BIN 308	MICROPUL 6B
4820-0002-0072	BIN 509	MICROPUL 6B
4820-0002-0068	BIN 508	MICROPUL 6B
4820-0003-0038	BIN 310	MICROPUL 6B
4990-0002-0036	BIN 309	MICROPUL 6B
4990-0004-0037	9/10 PULVICRON REC	BUHLER 16-6-220
4820-0002-0038	MILK BINS	MICROPUL 21-6-220
4820-0002-0035	MILK BIN BAG DUMP	APM 14048.6
4990-0007-0029	BLENDING BATCH BIN GEN ASP	BUHLER 25S-6-30
4990-0007-0036	BLENDER GEN ASP	BUHLER 16S-6-30
4990-0007-0032	BLENDING GEN ASP	MICROPUL 36S-8-30
4820-0003-0063	CSB BINNING GEN ASP	BUHLER 64S-6-20
4820-0003-0059	CSB BINNING GEN ASP	BUHLER 64S-6-20
4990-0006-0040	GEN ASPIRATION	BUHLER 9-8-220
4900-0001-0091	#5 SL GEN ASP & #5 EXPANDER	APM 14024.6
4990-0011-0001	FIBER REC GEN ASP	BUHLER 9-8-220
4820-0002-0011	PCM ASPIRATION FILTER	MICROPUL 1F1
4870-0010-0005	CF BRAN PACKING BINNING	MICROPUL 25-8-220
4900-0005-0035	BLDG 111 VACUUM	HOFFMAN 60X120
4870-0006-0006	110/210 REC GEN ASP	APM 16030.4
4990-0011-0029	FIBER REC GEN ASP	APM 16019.4
4990-0001-0029	COOLING TOWER	APM 40072.10

Emission Units (Plant ID/ State ID)	Description	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4820-0003-0022	INGREDIENT BIN 601	MICROPUL 4B
4820-0003-0026	INGREDIENT BIN 602	MICROPUL 4B
4820-0003-0030	INGREDIENT BIN 603	MICROPUL 2 1/2 B
4820-0003-0034	INGREDIENT BIN 604	APM 15105.4
4820-0003-0018	MICRO INGR DUMP FILTER	APM 15105.4
4820-0003-0004	MIXER GEN ASP	BUHLER 25S-6-30
4900-0001-0065	3/4 HAMMERMILL	APM 16009.6
4900-0001-0006	#3 & #4 EXPANDERS	APM 16009.6
4900-0005-0001	REPROCESS GEN CD ROOF	CD 376RF10
4900-0001-0042	#6 PULV GRINDER	BUHLER 37-8-220
4900-0001-0046	5/6 PULV AB FIN PROD SURGE BIN	MICROPUL 4B
4900-0002-0032	PELLET BINS	BUHLER 16S-6-30
4900-0003-0017	#1 PCM GRIND	APM 16022.8
4900-0003-0020	#2 PCM GRIND	APM 16022.8
4900-0003-0023	#3 PCM GRIND	APM 16022.8
4900-0003-0026	#4 PCM GRIND	APM 16022.8
4900-0003-0029	#5 PCM GRIND	APM 16022.8
4990-0006-0027	VISCOSITY FLOUR REC	APM 16022.8
4990-0011-0010	COND RECEIVER/SOY MEAL GRIND	APM 16014.8
4900-0005-0007	GRIND REJECT/SCRAP BIN	MICROPUL 2 1/2B
4900-0005-0029	BLDG 112 VACUUM	HOFFMAN 36X96
4900-0005-0006	N DAY GEN ASP & #5 EXPANDER	CD 484RF12
4820-0001-0093	BLENDED FOODS FILTER	DD 124RF10

Emission Units (Plant ID/ State ID)	Description	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4900-0001-0030	AB GRINDING SURGE BIN	BUHLER 37-8-220
4912-0002-0054	HOMINY TRUCK LDOUT ASP	DD 484RF12
4860-0018-0007	N HOMINY FEED	MICROPUL 1F2
4860-0018-0003	S HOMINY FEED	MICROPUL 1F2
4860-0019-0003	FTS DRYER ASPIRATION	DAY CYCLONE HV60
4860-0022-0017	SEC CLEAN GRINDING	APM 15030.8
4860-0024-0003	#1 FTS BRAN DRYER	CORONA 15 CYCLONE
4912-0006-0017	TRACK 16 BULK RAIL LDOUT	WEIDENMAN LFT 2X7
4860-0017-0073	FLAKING GEN ASP	APM 40120.8
4860-0017-0003	GERM DRYER	DAY CYCLONE HV56
4860-0017-0072	GERM ROLLS ASPIRATION	DAY CYCLONE HV56
4860-0017-0026	BIN 945 GERM RECEIVER	BUHLER 36S-6-30
4860-0023-0001	GERM DUSTERS ASP	APM 40120.8
4860-0024-0037	PET BRAN KICE LITES FILTER	MICROPUL 36S-6-30

7.3.3 Applicability Provisions and Applicable Regulations

a. The "affected milling operations" for the purpose of these unit-specific conditions, are process units described in Conditions 7.3.1 and 7.3.2.

b. The affected milling operations are subject to the emission limits identified in Condition 5.2.2.

c. The affected milling operations are subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.3.4 Non-Applicability of Regulations of Concern

a. The affected milling operations are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

b. The affected milling operations are not subject to 35 IAC 212.461, Grain Handling and Drying in General, and 35 IAC 212.463, Grain Drying Operations, because after being altered by the affected milling operations the corn cease to be grain as defined by 35 IAC 211.2650.

7.3.5 Operational and Production Limits and Work Practices

The Permittee shall follow good operating practices for the control equipment including periodic inspection, routine maintenance and prompt repair of defects.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected milling process is subject to the following:

a. The affected milling operations are subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

b. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.3.7 Testing Requirements

a. The affected milling operations are subject to the applicable testing requirements established in 35 IAC Part 212 Subpart A: General Provisions for Particulate Matter Emissions. This regulation is

attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected milling operations are subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected milling operations to demonstrate compliance with Conditions 5.5.1, 7.3.3, and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

a. The affected milling operations are subject to the applicable recordkeeping requirements established in 35 IAC Part 212, Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected milling operations are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

c. Records addressing use of good operating practices for the control equipment:

   i. Records for periodic inspection of the control equipment with date, individual performing the inspection, and nature of inspection; and

   ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

d. Records addressing the affected milling operations emissions, with supporting calculations, shall be maintained, as determined by Condition 7.3.12 to demonstrate compliance to Conditions 5.5.2 and 7.3.6.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected milling operations with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The affected milling operations are subject to the applicable reporting requirements established in 35 IAC Part 212, Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected milling operations are subject to the applicable reporting requirements established in State Construction and Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4)

c. Emissions from or operation of an affected milling operation in excess of the limits specified in Conditions 7.3.3, 7.3.5, and 7.3.6 within 30 days of such occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and data listed below:

To determine compliance with Conditions 5.5.1 and 7.3.6, emissions from the affected milling operations shall be calculated based on:

a. The applicable emission factors for Vegetable Oil Processing, Section 9.11.1, AP-42, Volume I, Fifth Edition, Supplement A, November 1995, or current edition, or

b. The applicant emission factors for Grain Elevators and Processes, Section 9.9.1, AP-42, Volume 1, Fifth Edition, Supplement A, April, 2003, or the current edition, or

c. The results of emission test(s) on the affected process or a similar process. The

emission test(s) shall be the most recent, valid and deemed acceptable to the Illinois EPA.

7.4 Corn Oil Solvent Extraction

7.4.1 Description

The extraction process removes oil from the corn germ with solvent in a rotocell extractor. As the corn germ make a complete revolution in the rotocell, hexane is added in each but the last cell which draws the oil from the corn germ. After the corn germ makes a revolution, it is dropped out of the rotocell to be further processed while the hexane-oil mixture is removed for further processing as well. The germ is sent to a desolventizer-toaster-dryer-cooler (DTDC). The DT section removes hexane from the germs by injecting steam into the germ. Once the hexane solvent has been driven from the germ, the hexane is condensed back to the liquid state in the distillation system for reuse. The DC removes moisture from the germ which is now called hominy and cools the hominy before it is sent for further processing. Particulate matter emissions from the DC are controlled by cyclones. The oil-hexane mixture is sent to a distillation system which utilizes steam to separate the hexane from the oil. The hexane vapors are then condensed to the liquid state and reused. The oil is pumped to storage. Any hexane in the air that passes through the distillation system is further scrubbed in a mineral oil absorber before the air is emitted to the atmosphere. The mineral oil-hexane mixture goes through the mineral oil stripper, separating the oil and hexane so each can be reused.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4861-0003-0018	CORN MEAL DC PLANT #2	MAC CYCLONE HV90
4861-0006-0005	CORN EXTRACTOR, DT AND DISTILLATION	MIN OIL ABSORBER

7.4.3 Applicability Provisions and Applicable Regulations

a. The extraction process described in Conditions 7.4.1 and 7.4.2 is an "affected extraction process" for the purpose of these unit-specific conditions.

b. The affected extraction process is subject to the emission limits identified in Condition 5.2.2.

c. The affected extraction process is subject to the NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction

for Vegetable Oil Production because the source owns or operates a vegetable oil production process that is a major source of HAP emissions. The Illinois EPA is administering NESHAP in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

d. The affected extraction process is subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

e. The affected extraction process is subject to 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart N: Vegetable Oil Processing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.4.4 Non-Applicability of Regulations of Concern

a. The affected extraction process is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

b. The affected extraction process is not subject to 35 IAC 212.461, Grain Handling and Drying in General, and 35 IAC 212.463, Grain Drying Operations, because after being altered by the milling operations the corn ceases to be grain as defined by 35 IAC 211.2650.

c. The affected extraction process is not subject to 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart K: Organic Material Emission Standards and Limitations for the Use of Organic Material because the extraction process does not meet the minimum requirements to be subject to this regulation.

d. This permit is issued based on the affected extraction process not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected extraction process is subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

7.4.5 Operational and Production Limits and Work Practices

The Permittee shall follow good operating practices for the control equipment including periodic inspection, routine maintenance and prompt repair of defects.

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected extraction process is subject to the following:

a. The affected extraction process is subject to emission limitations established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. The affected extraction process is subject to emission limitations established in 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart N: Vegetable Oil Processing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected extraction process is subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

d. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

e. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.4.7 Testing Requirements

a. The affected extraction process is subject to the testing requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil

Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. The affected extraction process is subject to the applicable testing requirements established in 35 IAC Part 212 Subpart A: General Provisions for Particulate Matter Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected extraction process is subject to testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected extraction process to demonstrate compliance with Conditions 5.5.1, 7.4.3, and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

a. The affected extraction process is subject to the recordkeeping requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. The affected extraction process is subject to the recordkeeping requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected extraction process is subject to the recordkeeping requirements established in 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart N: Vegetable Oil Processing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3)

d. The affected extraction process is subject to recordkeeping requirements established in State Construction and Operating Permits, which have been

attached hereto and incorporated herein by reference (see Attachment 4).

e. Records addressing the affected extraction process emissions, with supporting calculations, shall be maintained, as determined by Condition 7.4.12 to demonstrate compliance to Conditions 5.5.2 and 7.4.6.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected extraction process with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The affected extraction process is subject to the reporting requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. The affected extraction process is subject to the reporting requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected extraction process is subject to the reporting requirements established in 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart N: Vegetable Oil Processing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3)

d. The affected extraction process is subject to reporting requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

e. Emissions from or operation of an affected extraction process in excess of the limits specified in Conditions 7.4.3, 7.4.5, and 7.4.6 within 30 days of such occurrence.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and data listed below:

a. The affected extraction process is subject to the compliance determination requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. Compliance with Condition 7.4.3(c) is demonstrated by proper operating conditions of the affected extraction process.

c. Compliance with Condition 7.4.3(d) shall be demonstrated by the records required in Condition 7.4.9.

d. The affected extraction process is subject to the applicable compliance determination requirements as established in 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart N: Vegetable Oil Processing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

e. To determine compliance with Conditions 5.5.1 and 7.4.6, emissions from the affected extraction process shall be calculated based on:

i. The applicable emission factors for Vegetable Oil Processing, Section 9.11.1, AP-42, Volume I, Fifth Edition, Supplement A, November 1995, or current edition, or

ii. The results of emission test(s) on the affected process or a similar process. The emission test(s) shall be the most recent, valid and deemed acceptable to the Illinois EPA.

iii. The results of solvent inventory analyses on the affected process.

7.5 Soybean Preparation

7.5.1 Description

The soybean preparation plant prepares the soybeans for the extraction process. Soybeans are received from the grain handling operations. (Note: The above grain handling operations of the storage elevator process the soybean as a whole grain; see the previous sections 7.1 and 7.2 for emission sources and limitations for those process sources). The beans are cleaned and then heated and dried in a fluidized heating and moisture removal system. The beans then enter a multiple system/integrated process (including above referenced cleaning systems) that cracks the beans and separates the hull from the bean. The hulls are sent to storage for processing later and the bean is sent to a conditioner. The conditioned beans are flaked in one of the several flaking rolls. The flaked beans are ready for the extraction. The dryer and conditioners use steam, so the pollutants from gas combustion are not present.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4750-0036-0001	E-W BEAN CLEAN/DEHULL	484RF12
4750-0029-0074	HULLS GENERAL ASPIRATION	DD 276RFW12
4750-0029-0042	6th FLOOR GEN ASP	MICROPUL 100S-6-20
4750-0017-0043	CONDITIONER	DAY CYCLONE HV51
4750-0017-0044	CONDITIONER	DAY CYCLONE HV51
4750-0018-0043	FLAKER ASPIRATION	DAY CYCLONE HV74

7.5.3 Applicability Provisions and Applicable Regulations

a. The preparation operations described in Condition 7.5.1 and 7.5.2 are "affected preparation operations" for the purpose of these unit-specific conditions.

b. The affected preparation dryers and cleaning operations are subject to the emission limits identified in Condition 5.2.2.

c. The affected preparation operations are subject to 35 IAC Part 212 Subpart A: General Provisions and 35

IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

d. The affected dryers and cleaning operation is subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.5.4 Non-Applicability of Regulations of Concern

a. The affected preparation operations are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

b. The affected preparation, dryer and cleaning operations are not subject to 35 IAC 212.461, Grain Handling and Drying in General, and 35 IAC 212.463, Grain Drying Operations, because after being altered by the affected milling operations the soybeans cease to be grain as defined by 35 IAC 211.2650.

7.5.5 Operational and Production Limits and Work Practices

a. The Permittee shall follow good operating practices for the control equipment including periodic inspection, routine maintenance and prompt repair of defects.

b. The affected dryers and cleaning operation is subject to the applicable operational and production limits and work practices requirement6s in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected milling operations are subject to the following:

a. The affected preparation, dryers and cleaning operations are subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

b. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the , dryers and cleaning current month plus the preceding 11 months (running 12 month total) [T1].

7.5.7 Testing Requirements

a. The affected preparation dryers and cleaning operations are subject to the applicable testing requirements established in 35 IAC Part 212 Subpart A: General Provisions for Particulate Matter Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected preparation dryers and cleaning operations are subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected preparation, dryers and cleaning operations to demonstrate compliance with Conditions 5.5.1, 7.5.3, and 7.5.6, pursuant to Section 39.5(7)(b) of the Act:

a. The affected preparation operations are subject to the applicable recordkeeping requirements established in 35 IAC Part 212, Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected dryers and cleaning operation is subject to the applicable recordkeeping requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected preparation, dryers and cleaning operations are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

d. Records addressing use of good operating practices for the control equipment:

   i. Records for periodic inspection of the control equipment with date, individual performing the inspection, and nature of inspection; and

   ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

e. Records addressing the affected preparation, dryers and cleaning operations emissions, with supporting calculations, shall be maintained, as determined by Condition 7.5.12 to demonstrate compliance to Conditions 5.5.2 and 7.5.6.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected preparation, dryers and cleaning operations with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The affected preparation operations are subject to the applicable reporting requirements established in 35 IAC Part 212, Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected dryers and cleaning operation is subject to the applicable reporting requirements established in 35 IAC Part 212 Subpart A: General Provisions and

35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected preparation, dryers and cleaning operations are subject to the applicable reporting requirements established in State Construction and Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

d. Emissions from or operation of an affected preparation operation in excess of the limits specified in Conditions 7.5.3, 7.5.5, and 7.5.6 within 30 days of such occurrence.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.5.9 and the emission factors and data listed below:

To determine compliance with Conditions 5.5.1 and 7.5.6, PM emissions from the affected preparation, dryers and cleaning operations shall be calculated based on:

a. The applicable emission factors for Vegetable Oil Processing, Section 9.11.1, AP-42, Volume I, Fifth Edition, Supplement A, November 1995, or current edition, or

b. b. The applicable emission factors for grain elevators and grain processing, Tables 9.9.1-1 and 9.9.1-2, AP-42, Volume I, Fifth Edition, Supplement D, April, 2003, or current edition, or

c. The results of emission test(s) on the affected process or a similar process. The emission test(s) shall be the most recent, valid and deemed acceptable to the Agency.

7.6 Soybean Oil Solvent Extraction

7.6.1 Description

The extraction process removes oil from the bean flakes with solvent in a reflex extractor. As the bean flakes make a complete revolution in the extractor, hexane is added which draws the oil from the flakes. After the flakes make a revolution, they are dropped out of the extractor to be further processed while the hexane-oil mixture (miscella) is removed for further processing as well. The hexane saturated flakes are sent to a desolventizer-toaster-dryer-cooler (DTDC). The DT section removes hexane from the flakes by injecting steam into the flakes. Once the hexane solvent has been driven from the flakes, the hexane is condensed back to the liquid state for reuse. The DC removes moisture from the flakes which are now called bean meal and cools the bean meal before it is sent for further processing. Particulate matter emissions from the DC are controlled by cyclones. The oil-hexane mixture is sent to a distillation system which utilizes steam to separate the hexane from the oil. The hexane vapors are then condensed to the liquid state and reused. The oil is pumped to storage. Any hexane in the air that passes through the distillation system is further scrubbed in a mineral oil absorber before the air is emitted to the atmosphere. The mineral oil-hexane mixture goes through the mineral oil stripper, separating the oil and hexane so each can be reused.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4750-0002-0018	MEAL DRY & COOL CYCLONE #1	DAY CYCLONE HV90
4750-0002-0020	MEAL DRY & COOL CYCLONE #2	DAY CYCLONE HV90
4750-0002-0022	MEAL DRY & COOL CYCLONE #3	DAY CYCLONE HV90
4750-0002-0024	MEAL DRY & COOL CYCLONE #4	DAY CYCLONE HV90
4750-0007-0004	SOY EXTRACTOR, DT AND DISTILLATION	MIN OIL ABSORBER

7.6.3 Applicability Provisions and Applicable Regulations

a. The extraction process described in Conditions 7.6.1 and 7.6.2 is an "affected extraction process" for the purpose of these unit-specific conditions.

b. The affected extraction process is subject to the emission limits identified in Condition 5.2.2.

c. The affected extraction process is subject to the NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production because the source owns or operates a vegetable oil production process that is a major source of HAP emissions. The Illinois EPA is administering NESHAP in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

d. The affected extraction process is subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

e. The affected extraction process is subject to 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart N: Vegetable Oil Processing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.6.4 Non-Applicability of Regulations of Concern

a. The affected extraction process is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

b. The affected extraction process is not subject to 35 IAC 212.461, Grain Handling and Drying in General, and 35 IAC 212.463, Grain Drying Operations, because after being altered by the preparation operations the soybeans cease to be grain as defined by 35 IAC 211.2650.

c. The affected extraction process is not subject to 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart K: Organic Material Emission Standards and Limitations for the Use of Organic Material because the extraction process does not meet the minimum requirements to be subject to this regulation.

d. This permit is issued based on the affected extraction process not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected extraction

process is subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

7.6.5 Operational and Production Limits and Work Practices

The Permittee shall follow good operating practices for the control equipment including periodic inspection, routine maintenance and prompt repair of defects.

7.6.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected extraction process is subject to the following:

a. The affected extraction process is subject to emission limitations established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. The affected extraction process is subject to emission limitations established in 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart N: Vegetable Oil Processing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected extraction process is subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

d. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

e. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.6.7 Testing Requirements

a. The affected extraction process is subject to the testing requirements established in NESHAP, 40 CFR 63

Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. The affected extraction process is subject to the applicable testing requirements established in 35 IAC Part 212 Subpart A: General Provisions for Particulate Matter Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected extraction process is subject to testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.6.8 Monitoring Requirements

None

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected extraction process to demonstrate compliance with Conditions 5.5.1, 7.6.3, and 7.6.6, pursuant to Section 39.5(7)(b) of the Act:

a. The affected extraction process is subject to the recordkeeping requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. The affected extraction process is subject to the recordkeeping requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected extraction process is subject to the recordkeeping requirements established in 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart N: Vegetable Oil Processing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3)

d. The affected extraction process is subject to recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

e. Records addressing the affected extraction process emissions, with supporting calculations, shall be maintained, as determined by Condition 7.6.12 to demonstrate compliance to Conditions 5.5.2 and 7.6.6.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected extraction process with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The affected extraction process is subject to the reporting requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. The affected extraction process is subject to the reporting requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected extraction process is subject to the reporting requirements established in 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart N: Vegetable Oil Processing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3)

d. The affected extraction process is subject to reporting requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

e. Emissions from or operation of an affected extraction process in excess of the limits specified in Conditions 7.6.3, 7.6.5, and 7.6.6 within 30 days of such occurrence.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.6.9 and the emission factors and data listed below:

a. The affected extraction process is subject to the compliance determination requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. Compliance with Condition 7.6.3(c) is demonstrated by proper operating conditions of the affected extraction process.

c. Compliance with Condition 7.6.3(d) shall be demonstrated by the records required in Condition 7.6.9.

d. The affected extraction process is subject to the applicable compliance determination requirements as established in 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart N: Vegetable Oil Processing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

e. To determine compliance with Conditions 5.5.1 and 7.6.6, emissions from the affected extraction process shall be calculated based on:

   i. The applicable emission factors for Vegetable Oil Processing, Section 9.11.1, AP-42, Volume I, Fifth Edition, Supplement A, November 1995, or current edition, or

   ii. The results of emission test(s) on the affected process or a similar process. The emission test(s) shall be the most recent, valid and deemed acceptable to the Illinois EPA.

   iii. The results of solvent inventory analyses on the affected process.

7.7 Soybean Products Milling and Handling

7.7.1 Description

The hulls collected at the preparation building in the various dust control devices are recycled to the hull grinding process. After grinding, the hulls are either temporarily stored or sent to the pellet mill. Hulls sent to the mill are formed into pellets, cooled, and sent to the hull pellet storage tanks or sheds for storage. From the dryer/ cooler, the defattened soybean flakes (meal) are conveyed to the preparation building where they are sized by meal screens and grinders. The meal then receives a flow agent before transfer to the meal sheds or tanks for storage and load out by truck and/or rail.

7.7.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
4750-0029-0032	MEAL BINNING	APM 40240.8
4750-0029-0045	MEAL SCREENER GEN ASP	MICROPUL 100S-6-20
4750-0029-0001	MEAL GRIND GEN ASP	APM 40224.4
4750-0023-0017	KAOLIN/CALCIUM BIN REC	APM 16050.8
4912-0008-0006	BLDG 201/202 VACUUM	HOFFMAN 36X96
4912-0009-0005	BLDG 208 VACUUM	HOFFMAN 36X96
4750-0029-0027	ROUND BIN GEN ASP	APM 14072.6
4912-0004-0022	TRUCK MEAL LOADOUT	376RF8
4912-0003-0011	RAIL MEAL LOADOUT #1	376RF12
4750-0033-0001	LTMS & RAIL MEAL TRANSFER	376RF8
4750-0033-0011	LTMS & RAIL MEAL LOADOUT	MAC 144MCF416
4750-0025-0015	HULL PELLET COOLER	MAC CYCLONE HV59

7.7.3 Applicability Provisions and Applicable Regulations

a. The "affected milling operations" for the purpose of these unit-specific conditions, are process units described in Conditions 7.7.1 and 7.7.2.

b. The affected milling operations are subject to the emission limits identified in Condition 5.2.2.

c. The affected milling operations are subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.7.4 Non-Applicability of Regulations of Concern

a. The affected milling operations are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas,

because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

b. The affected milling operations are not subject to 35 IAC 212.461, Grain Handling and Drying in General, and 35 IAC 212.463, Grain Drying Operations, because after being altered by the affected preparation and extraction operations the soybeans cease to be grain as defined by 35 IAC 211.2650.

7.7.5 Operational and Production Limits and Work Practices

The Permittee shall follow good operating practices for the control equipment including periodic inspection, routine maintenance and prompt repair of defects.

7.7.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected protein process is subject to the following:

a. The affected milling operations are subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

b. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.7.7 Testing Requirements

a. The affected milling operations are subject to the applicable testing requirements established in 35 IAC Part 212 Subpart A: General Provisions for Particulate Matter Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected milling operations are subject to the applicable testing requirements established in State

Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.7.8 Monitoring Requirements

None

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected milling operations to demonstrate compliance with Conditions 5.5.1, 7.7.3, and 7.7.6, pursuant to Section 39.5(7)(b) of the Act:

a. The affected milling operations are subject to the applicable recordkeeping requirements established in 35 IAC Part 212, Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected milling operations are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

c. Records addressing use of good operating practices for the control equipment:

   i. Records for periodic inspection of the control equipment with date, individual performing the inspection, and nature of inspection; and

   ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

d. Records addressing the affected milling operations emissions, with supporting calculations, shall be maintained, as determined by Condition 7.7.12 to demonstrate compliance to Conditions 5.5.2 and 7.7.6.

7.7.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected protein process with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall

describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The affected milling operations are subject to the applicable reporting requirements established in 35 IAC Part 212, Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

b. The affected milling operations are subject to the applicable reporting requirements established in State Construction and Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4)

c. Emissions from or operation of an affected milling operation in excess of the limits specified in Conditions 7.7.3, 7.7.5, and 7.7.6 within 30 days of such occurrence.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.7.9 and the emission factors and data listed below:

To determine compliance with Conditions 5.5.1 and 7.7.6, emissions from the affected milling operations shall be calculated based on:

a. The applicable emission factors for Vegetable Oil Processing, Section 9.11.1, AP-42, Volume I, Fifth Edition, Supplement A, November 1995, or current edition, or

b. The applicant emission factors for Grain Elevators and Processes, Section 9.9.1, AP-42, Volume 1, Fifth Edition, Supplement A, April, 2003, or the current edition, or

c. The results of emission test(s) on the affected process or a similar process. The emission test(s) shall be the most recent, valid and deemed acceptable to the Illinois EPA.

7.8 Cogen Plant: Boilers, Emergency Generator and Associated Equipment

7.8.1 Description

The electrical cogeneration plant is a 20 megawatt coal fired unit which provides all electrical power and steam to the grain handling and extraction production lines. The 322.5 mmBtu/hr unit consists of a circulating fluidized bed (CFB) boiler that controls pollutant emissions by utilizing limestone sorbent and a pulse-jet baghouse. The CFB boiler can use petroleum coke and tire chips as a supplement fuel to the existing coal feed. The CFB boiler burns either natural gas or propane during startup. The plant also has a FM package boiler that serves as backup to the CFB unit, which only provides process steam for the facility. It burns No. 2 fuel oil or natural gas and has a heat input ranging from 245.7 to 262 million BTU per hour depending on the fuel burned. The boilers are backed up by a 2168 hp (115 kW) emergency generator, which burns No. 2 fuel oil. The generator is operated only during monthly 1-hour test periods and if the CFB boiler is not operating or if CFB boiler is in the process of being shut down. The CFB boiler has continuous emission monitoring (CEM) systems to measure for SO_2, NO_x, CO and Opacity. The FM boiler has CEM systems for NO_x, O_2 and Opacity.

7.8.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
FM-26	F&M PACKAGE BOILER	LOW NO_x Burner
CFB BOILER	CFB FLUIDIZED BED BOILER	FULLER 6M304TA 14.25 & NO_x Red
F-108	COAL RECEIVING & HANDLING	Fugitives
CP-108	REINJECTION BIN	MAC 97-2861-6C-100
CP-104	COAL BUNKER	FLEX KLEEN 58 BVBS 16IIG
CP-105	LIMESTONE SILO	FLEX KLEEN 100 BVBS 16IIG
CP-103	COAL SILO	FLEX KLEEN 58 BVBS 16IIG
CP-101	FLY ASH SILO	FLEX KLEEN 100CTBC 54IIG
CP-104A	SYSTEM C STORAGE	SMOOT 84BV16

7.8.3 Applicability Provisions and Applicable Regulations

a. The "affected boilers and emergency generator" for the purpose of these unit-specific conditions, are fuel combustion emission units as described in Conditions 7.8.1 and 7.8.2.

b. The affected boilers, emergency generator and associated emission units are subject to the emission limits identified in Condition 5.2.2.

c. The affected CFB boiler is subject to the NSPS, 40 CFR Subparts A: General Provisions and NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators, because the affected CFB boiler commenced construction after August 17, 1971. The CFB boiler is subject to the particulate matter and nitrogen oxides standards under subpart D_b and to the sulfur dioxide standards under this subpart, Subpart D (Sec. 60.43). The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 2).

d. Each affected boiler is subject to the NSPS, 40 CFR Subparts A: General Provisions and NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, because each affected boiler was constructed, modified, or commenced reconstruction after November 25, 1986. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 2).

e. Each affected boiler and emergency generator are subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart B: Visible Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

f. Each affected boiler and emergency generator are subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart E: Particulate Matter Emissions From Fuel Combustion Emission Units. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

g. Each affected boiler and emergency generator are subject to 35 IAC Part 214 Subpart A: General Provisions and 35 IAC Part 214 Subpart B: Sulfur

Limitations for New Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

h. Each affected boiler and emergency generator are subject to 35 IAC Part 216 Subpart A: General Provisions and 35 IAC Part 216 Subpart B: Carbon Monoxide Emissions from Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

i. Each affected boiler is subject to 35 IAC Part 217 Subpart A: General Provisions and 35 IAC Part 217 Subpart B: Nitrogen Oxide Emissions from New Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

j. Each affected associated emission units are subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

k. The affected CFB boiler is subject to the emission limits established in State Construction and Operating Permits for the operation in excess of applicable emission standards during startup, malfunction and breakdown. The State Construction and Operating Permits have been attached hereto and incorporated herein by reference (see Attachment 4).

7.8.4 Non-Applicability of Regulations of Concern

a. Pursuant to 35 IAC 215.303, fuel combustion emission units are not subject to 35 IAC 215.301, Use of Organic Material.

b. The affected emergency generator is not subject to 35 IAC 217.121, Emissions of Nitrogen Oxides from New Fuel Combustion Emission Sources, because the actual heat input is less than 73.2 MW (250 mmBtu/hr).

c. The affected boilers and emergency generator are not subject to the requirements of the NO_x Compliance Programs of 35 IAC 217 Part 217, because each affected generator and/or turbine has nameplate capacities less than 25 Mwe.

7.8.5 Operational and Production Limits and Work Practices

a. The Permittee shall follow good operating practices for the control equipment including periodic

inspection, routine maintenance and prompt repair of defects.

7.8.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected boiler is subject to the following:

a. The affected boilers are subject to the emission limitations established in NSPS, 40 CFR 60 Subparts A: General Provisions and/or NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators and/or NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected boilers, emergency generator and associated emission units are subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

c. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.8.7 Testing Requirements

a. The affected boilers are subject to the testing requirements established in NSPS, 40 CFR 60 Subparts A: General Provisions and/or NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators and/or NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected boilers, emergency generator and associated emission units are subject to the testing requirements established in 35 IAC Part 212 Subpart A: General Provisions for Particulate Matter Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected boilers and emergency generator are subject to the testing requirements established in 35 IAC Part 214 Subpart A: General Provisions for Sulfur Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

d. The affected boilers and emergency generator are subject to testing requirements established in 35 IAC Part 216 Subpart A: General Provisions for Carbon Monoxide Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

e. The affected boilers, emergency generator and associated emission units are subject to testing requirements established by State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.8.8 Monitoring Requirements

a. The affected boilers are subject to the CEM system monitoring requirements established in NSPS, 40 CFR 60 Subparts A: General Provisions and/or NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators and/or NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected boilers are subject to the CEM system monitoring requirements established by State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected boiler to demonstrate compliance with Conditions 5.5.1, 7.8.3, and 7.8.6, pursuant to Section 39.5(7)(b) of the Act:

a. The affected CFB boiler is subject to the applicable recordkeeping requirements established in State Construction and Operating Permits for the operation in excess of applicable emission standards during startup, malfunction and breakdown. The State Construction and Operating Permits have been attached hereto and incorporated herein by reference (see Attachment 4).

b. The affected boilers are subject to the recordkeeping requirements established in NSPS, 40 CFR 60 Subparts A: General Provisions and/or NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators and/or NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, which have been attached hereto and incorporated herein by reference (see Attachment 2).

c. The affected boilers and emergency generator are subject to the applicable recordkeeping requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart B: Visible Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

d. The affected boilers and emergency generator are subject to the applicable recordkeeping requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart E: Particulate Matter Emissions From Fuel Combustion Emission Units. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

e. The affected boilers and emergency generator are subject to the applicable recordkeeping requirements established in 35 IAC Part 214 Subpart A: General Provisions and 35 IAC Part 214 Subpart B: Sulfur Limitations for New Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

f. The affected boilers and emergency generator are subject to the applicable recordkeeping requirements established in 35 IAC Part 216 Subpart A: General Provisions and 35 IAC Part 216 Subpart B: Carbon Monoxide Emissions from Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

g. The affected associated emission units are subject to the applicable recordkeeping requirements established in 35 IAC Part 212, Subpart A: General Provisions

and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

h. The affected boilers, emergency generator and associated emission units are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits. The State Construction and Operating Permits have been attached hereto and incorporated herein by reference (see Attachment 4).

i. Records addressing use of good operating practices for the control equipment:

   i. Records for periodic inspection of the control equipment with date, individual performing the inspection, and nature of inspection; and

   ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

j. Records addressing Bituminous and Subbituminous coal consumption (ton/month and ton/year).

k. Records addressing Petroleum Coke and Tire Chips consumption (ton/month and ton/year) and percent weight basis per load of coal (% wt/load of coal).

l. Records addressing No 2 Fuel Oil consumption (gal/month and gal/year) and sulfur content as fired per emission unit (wt %).

m. Records addressing Natural Gas consumption per emission unit (scf/month and scf/year).

n. Records addressing Propane consumption (gal/month and gal/year).

o. The affected boiler emissions, emergency generator and associated emission units with supporting calculations, shall be maintained, as determined by the procedures in Condition 7.8.12 to demonstrate compliance to Conditions 5.5.2 and 7.8.6.

7.8.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected boiler with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe

the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The affected boilers are subject to the reporting requirements established in NSPS, 40 CFR 60 Subparts A: General Provisions and/or NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators and/or NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected boilers and emergency generators are subject to the applicable reporting requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart B: Visible Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected boilers and emergency generators are subject to the applicable reporting requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart E: Particulate Matter Emissions From Fuel Combustion Emission Units. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

d. The affected boilers and emergency generators are subject to the applicable reporting requirements established in 35 IAC Part 214 Subpart A: General Provisions and 35 IAC Part 214 Subpart B: Sulfur Limitations for New Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

e. The affected boilers and emergency generators are subject to the applicable reporting requirements established in 35 IAC Part 216 Subpart A: General Provisions and 35 IAC Part 216 Subpart B: Carbon Monoxide Emissions from Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

f. The affected associated emission units are subject to the applicable reporting requirements established in 35 IAC Part 212, Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

g. The affected boilers, emergency generator and associated emission units are subject to the applicable reporting requirements established in State Construction and Operating Permits. The State Construction and Operating Permits have been attached hereto and incorporated herein by reference (see Attachment 4).

h. Emissions from or operation of an affected boiler, emergency generator or an associated emission unit in excess of the limits specified in Conditions 7.8.3, 7.8.5, and 7.8.6 within 30 days of such occurrence.

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

a. Compliance with the emission limits in Condition 7.8.3(e) is demonstrated by proper operation of the control systems and shall be based on the work practice requirements in Condition 7.8.5.

b. Compliance with the emission limits in Condition 7.8.3(h) is demonstrated under inherent operating conditions of an affected boiler.

c. Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.8.9 and the emission factors and data listed below:

i. The applicable emission factors for the Bituminous and Subbituminous Coal Combustion, Section 1.1, AP-42, Volume I, Fifth Edition, Supplement A, September/1998, or the current edition;

ii. The applicable emission factors for the Natural Gas-Fired Boiler Combustion, Section 1.4, AP-42, Volume I, Fifth Edition, Supplement A, March/1998, or the current edition;

iii. The applicable emission factors for the No. 2 Oil-Fired Boiler Combustion, Section 1.3, AP-42, Volume I, Fifth Edition, Supplement A, September/1998, or the current edition;

iv. The applicable emission factors for the Propane-Fired Boiler Combustion, Section 1.4, AP-42, Volume I, Fifth Edition, Supplement A, March/1998, or the current edition;

v. The applicable emission factors for the No. 2 Oil-Fired Reciprocating Engine Combustion, Section 3.3, AP-42, Volume I, Fifth Edition, Supplement A, October/1998, or the current edition;

vi. Data from analyses of No. 2 Fuel Oil representative of that combusted in the boilers;

vii. Engineering estimates on manufacturers' data;

viii. The applicable emission factor for SCC 30201407 from Corn Wet Milling, Section 9.9.7, AP-42, Volume 1, Fifth Edition, Supplement A, January 1995, or the current edition;

ix. The applicable emission factor for SCC 30500719 from Cement Manufacturing: Wet Process - 3241, AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, March 1990, or the current edition; and

x. The results of emission test(s) on the affected process or a similar process. The emission test(s) shall be the most recent, valid and deemed acceptable to the Illinois EPA.

7.9 Storage Tanks

7.9.1 Description

The hexane storage tanks are horizontal tanks. Each is vented through a pressure valve set at 9 inches of water and a flame arrestor unit. The system is vapor balanced and plumbed in a closed circuit to the corn and soy extraction processes. Hexane emissions, associated with tank filling and use, are thus vented through the main absorber vents. The gasoline storage tank has a 350 gallon capacity.

7.9.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
4750-0011-0001	VEGETABLE OIL TANK #2 (300,809)	None
4750-0011-0002	VEGETABLE OIL TANK #3 (1,381,843)	None
4750-0011-0003	VEGETABLE OIL TANK #4 (1,586,300)	None
4750-0011-0004	VEGETABLE OIL TANK #5 (1,586,300)	None
4750-0011-0005	VEGETABLE OIL TANK #7 (950,000)	None
4750-0011-0006	VEGETABLE OIL TANK #8 (2,641,778)	None
4750-0011-0007	VEGETABLE OIL TANK #9 (2,518,619)	None
4750-0011-0008	VEGETABLE OIL TANK #10 (4,018,627)	None
4750-0011-0009	VEGETABLE OIL TANK #11 (5,510,631)	None
4750-0005-0005	#4A HEXANE STORAGE TANK (46,000)	Vented to Main Absorber Vents-Closed Loop System
4861-0001-0006	#1 HEXANE STORAGE TANK (14,930)	Vented to Main Absorber Vents-Closed Loop System
4861-0001-0007	#2 HEXANE STORAGE TANK (14,930)	Vented to Main Absorber Vents-Closed Loop System
4861-0001-0008	#3 HEXANE STORAGE TANK (IDLE) (14,930)	Vented to Main Absorber Vents-Closed Loop System
4861-0014-0002	VEGETABLE OIL TANK #6 (498,215)	None
4750-0054-0017	#7 HEXANE STORAGE TANK (30,662)	Vented to Main Absorber Vents-Closed Loop System

Emission Unit	Description	Emission Control Equipment
4750-0054-0015	#5 HEXANE STORAGE TANK (30,662)	Vented to Main Absorber Vents-Closed Loop System
4750-0054-0016	#6 HEXANE STORAGE TANK (30,662)	Vented to Main Absorber Vents-Closed Loop System
L-OIL-3	GAS STORAGE TANK 350 GALLONS	None

7.9.3 Applicability Provisions and Applicable Regulations

a. The "affected hexane and gasoline storage tanks" for the purpose of these unit-specific conditions, are storage tanks described in Conditions 7.9.1 and 7.9.2.

b. The affected hexane and gasoline storage tanks are subject to the emission limits identified in Condition 5.2.2.

c. The affected hexane and gasoline storage tanks are subject to 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart B: Organic Emissions from Storage and Loading Operations. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.9.4 Non-Applicability of Regulations of Concern

None

7.9.5 Operational and Production Limits and Work Practices

a. The affected hexane and gasoline storage tanks are subject to the Operational and Production Limits and Work Practices 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart B: Organic Emissions from Storage and Loading Operations. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.9.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.9.7 Testing Requirements

None

7.9.8 Monitoring Requirements

None

7.9.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected storage tanks to demonstrate compliance with Conditions 5.5.1 and 7.9.5, pursuant to Section 39.5(7)(b) of the Act:

a. Design information for the affected storage tanks showing the presence of permanent submerged loading pipe or the use of submerged loading fill when loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) or loading of gasoline.

b. Maintenance and repair records for the affected storage tanks, as related to the repair or replacement of the loading pipe.

c. Identification and throughput of each material stored in the affected storage tanks, gal/yr.

d. The VOM emissions from the affected storage tanks based on the materials stored, the tank throughputs, and the applicable emission factors and formulas with supporting calculations, ton/yr.

7.9.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected storage tanks with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. Any storage of VOL in the affected storage tanks that is not in compliance with the requirements of Conditions 7.9.3(c) or 7.9.3(d) within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.

7.9.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected storage tanks without prior notification to the Illinois EPA or

revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

a. Changes to components related to either the submerged loading pipe or submerged fill, including addition of new components and repair and replacement of components.

b. Changes in the material stored in the affect storage tank, provided the affected storage tanks continues to comply with the Conditions of Section 7.9 of this permit.

7.9.12 Compliance Procedures

a. Compliance with Conditions 7.9.3(g) is considered to be assured by the use of submerged loading pipe or submerged fill as required in Condition 7.9.5(a) and by the recordkeeping requirement of Condition 7.9.9(a).

b. Compliance with the emission limits in Conditions 5.5 shall be based on the recordkeeping requirements in Condition 7.9.9 and the emission factors and formulas listed below:

i. For purposes of calculating VOM emissions, the current version of the USEPA's Tanks Program is acceptable.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after October 7, 2003 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this

permit, provided that [Section 39.5(12)(a)(i) of the Act]:

a. The changes do not violate applicable requirements;

b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

Monitoring Period	Report Due Date
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;

e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

iii. Illinois EPA - Air Permit Section (MC 11)

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

i. At reasonable times, for the purposes of assuring permit compliance; or

ii. As otherwise authorized by the CAA, or the Act.

e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(l), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 Applicable National Emission Standards for Hazardous Air Pollutants (NESHAP)

TITLE 40--PROTECTION OF ENVIRONMENT
CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY

PART 63--NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart A--General Provisions

Source: 59 FR 12430, Mar. 16, 1994, unless otherwise noted.

Sec. 63.1 Applicability.

(a) General.

(1) Terms used throughout this part are defined in Sec. 63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in Sec. 63.2.

(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.

(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (including those requirements in part 60 of this chapter), or a standard issued under State authority.

(4) The provisions of this **subpart** (i.e., **subpart** A of this part) apply to owners or operators who are subject to subsequent subparts of this part, except

when otherwise specified in a particular **subpart** or in a relevant standard. The general provisions in **subpart** A eliminate the repetition of requirements applicable to all owners or operators affected by this part. The general provisions in **subpart** A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.

(5) [Reserved]

(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.

(7) **Subpart** D of this part contains regulations that address procedures for an owner or operator to obtain an extension of compliance with a relevant standard through an early reduction of emissions of hazardous air pollutants pursuant to section 112(i)(5) of the Act.

(8) **Subpart** E of this part contains regulations that provide for the establishment of procedures consistent with section 112(l) of the Act for the approval of State rules or programs to implement and enforce applicable Federal rules promulgated under the authority of section 112. **Subpart** E also establishes procedures for the review and withdrawal of section 112 implementation and enforcement authorities granted through a section 112(l) approval.

(9) [Reserved]

(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.

(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is

scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in Sec. 63.9(i).

(13) Special provisions set forth under an applicable **subpart** of this part or in a relevant standard established under this part shall supersede any conflicting provisions of this **subpart**.

(14) Any standards, limitations, prohibitions, or other federally enforceable requirements established pursuant to procedural regulations in this part [including, but not limited to, equivalent emission limitations established pursuant to section 112(g) of the Act] shall have the force and effect of requirements promulgated in this part and shall be subject to the provisions of this **subpart**, except when explicitly specified otherwise.

(b) Initial applicability determination for this part.

(1) The provisions of this part apply to the owner or operator of any stationary source that—

(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and

(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.

(2) In addition to complying with the provisions of this part, the owner or operator of any such source may be required to obtain an operating permit issued to

stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to title V of the Act (42 U.S.C. 7661). For more information about obtaining an operating permit, see part 70 of this chapter.

(3) An owner or operator of a stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants who determines that the source is not subject to a relevant standard or other requirement established under this part, shall keep a record of the applicability determination as specified in Sec. 63.10(b)(3) of this **subpart**.

(c) Applicability of this part after a relevant standard has been set under this part.

(1) If a relevant standard has been established under this part, the owner or operator of an affected source shall comply with the provisions of this **subpart** and the provisions of that standard, except as specified otherwise in this **subpart** or that standard.

(2) If a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from the permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources will specify whether—

(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);

(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or

(iii) Area sources affected by that emission standard are immediately subject to the requirement to apply for and obtain a title V permit in all States. If a standard fails to specify what the permitting requirements will be for area sources affected by that standard, then area sources that are subject to the

standard will be subject to the requirement to obtain a title V permit without deferral. If the owner or operator is required to obtain a title V permit, he or she shall apply for such permit in accordance with part 70 of this chapter and applicable State regulations, or in accordance with the regulations contained in this chapter to implement the Federal title V permit program (42 U.S.C. 7661), whichever regulations are applicable.

(3) [Reserved]

(4) If the owner or operator of an existing source obtains an extension of compliance for such source in accordance with the provisions of **subpart** D of this part, the owner or operator shall comply with all requirements of this **subpart** except those requirements that are specifically overridden in the extension of compliance for that source.

(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this **subpart**.

(d) [Reserved]

(e) Applicability of permit program before a relevant standard has been set under this part. After the effective date of an approved permit program in the State in which a stationary source is (or would be) located, the owner or operator of such source may be required to obtain a title V permit from the permitting authority in that State (or revise such a permit if one has already been issued to the source) before a relevant standard is established under this part. If the owner or operator is required to obtain (or revise) a title V permit, he/she shall apply to obtain (or revise) such permit in accordance with the regulations contained in part 70 of this chapter and applicable State regulations, or the regulations codified in this chapter to implement the Federal title V permit program (42 U.S.C. 7661), whichever regulations are applicable.

Sec. 63.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Pub. L. 101-549, 104 Stat. 2399).

Actual emissions is defined in **subpart** D of this part for the purpose of granting a compliance extension for an early reduction of hazardous air pollutants.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

Affected source, for the purposes of this part, means the stationary source, the group of stationary sources, or the portion of a stationary source that is regulated by a relevant standard or other requirement established pursuant to section 112 of the Act. Each relevant standard will define the "affected source" for the purposes of that standard. The term "affected source," as used in this part, is separate and distinct from any other use of that term in EPA regulations such as those implementing title IV of the Act. Sources regulated under part 60 or part 61 of this chapter are not affected sources for the purposes of part 63.

Alternative emission limitation means conditions established pursuant to sections 112(i)(5) or 112(i)(6) of the Act by the Administrator or by a State with an approved permit program.

Alternative emission standard means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act.

Alternative test method means any method of sampling and analyzing for an air pollutant that is not a test method in this chapter and that has been demonstrated to the Administrator's satisfaction, using Method 301 in Appendix A of this part, to produce results adequate for the Administrator's determination that it may be used in place of a test method specified in this part.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title V of the Act (42 U.S.C. 7661).

Area source means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

Commenced means, with respect to construction or reconstruction of a stationary source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the Administrator (or a State with an approved permit program) pursuant to section 112 of the Act.

Compliance plan means a plan that contains all of the following:

(1) A description of the compliance status of the affected source with respect to all applicable requirements established under this part;

(2) A description as follows:

(i) For applicable requirements for which the source is in compliance, a statement that the source will continue to comply with such requirements;

(ii) For applicable requirements that the source is required to comply with by a future date, a statement that the source will meet such requirements on a timely basis;

(iii) For applicable requirements for which the source is not in compliance, a narrative description of how the source will achieve compliance with such requirements on a timely basis;

(3) A compliance schedule, as defined in this section; and

(4) A schedule for the submission of certified progress reports no less frequently than every 6 months for affected sources required to have a schedule of compliance to remedy a violation.

Compliance schedule means:

(1) In the case of an affected source that is in compliance with all applicable requirements established under this part, a statement that the source will continue to comply with such requirements; or

(2) In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet such requirements on a timely basis and, if required by an applicable

requirement, a detailed schedule of the dates by which each step toward compliance will be reached; or

(3) In the case of an affected source not in compliance with all applicable requirements established under this part, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established pursuant to section 112 of the Act for which the affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

Construction means the on-site fabrication, erection, or installation of an affected source.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

Continuous opacity monitoring system (COMS) means a continuous monitoring system that measures the opacity of emissions.

Continuous parameter monitoring system means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Effective date means:

(1) With regard to an emission standard established under this part, the date of promulgation in the Federal Register of such standard; or

(2) With regard to an alternative emission limitation or equivalent emission limitation determined by the Administrator (or a State with an approved permit program), the date that the alternative emission

limitation or equivalent emission limitation becomes effective according to the provisions of this part. The effective date of a permit program established under title V of the Act (42 U.S.C. 7661) is determined according to the regulations in this chapter establishing such programs.

Emission standard means a national standard, limitation, prohibition, or other regulation promulgated in a **subpart** of this part pursuant to sections 112(d), 112(h), or 112(f) of the Act.

Emissions averaging is a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a **subpart** of this part, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emissions from points that are not controlled to the level required by the relevant standard.

EPA means the United States Environmental Protection Agency.

Equivalent emission limitation means the maximum achievable control technology emission limitation (MACT emission limitation) for hazardous air pollutants that the Administrator (or a State with an approved permit program) determines on a case-by-case basis, pursuant to section 112(g) or section 112(j) of the Act, to be equivalent to the emission standard that would apply to an affected source if such standard had been promulgated by the Administrator under this part pursuant to section 112(d) or section 112(h) of the Act.

Excess emissions and continuous monitoring system performance report is a report that must be submitted periodically by an affected source in order to provide data on its compliance with relevant emission limits, operating parameters, and the performance of its continuous parameter monitoring systems.

Existing source means any affected source that is not a new source.

Federally enforceable means all limitations and conditions that are enforceable by the Administrator and citizens under the Act or that are enforceable under other statutes administered by the Administrator. Examples of federally enforceable limitations and conditions include, but are not limited to:

(1) Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;

(2) New source performance standards established pursuant to section 111 of the Act, and emission standards established

pursuant to section 112 of the Act before it was amended in 1990;

(3) All terms and conditions in a title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;

(4) Limitations and conditions that are part of an approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP);

(5) Limitations and conditions that are part of a Federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by the EPA in accordance with 40 CFR part 51;

(6) Limitations and conditions that are part of an operating permit issued pursuant to a program approved by the EPA into a SIP as meeting the EPA's minimum criteria for Federal enforceability, including adequate notice and opportunity for EPA and public comment prior to issuance of the final permit and practicable enforceability;

(7) Limitations and conditions in a State rule or program that has been approved by the EPA under **subpart** E of this part for the purposes of implementing and enforcing section 112; and

(8) Individual consent agreements that the EPA has legal authority to create.

Fixed capital cost means the capital needed to provide all the depreciable components of an existing source.

Fugitive emissions means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

Hazardous air pollutant means any air pollutant listed in or pursuant to section 112(b) of the Act.

Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit.

Lesser quantity means a quantity of a hazardous air pollutant that is or may be emitted by a stationary source that the Administrator establishes in order to define a major source under an applicable **subpart** of this part.

Major source means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

New source means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part.

One-hour period, unless otherwise defined in an applicable **subpart**, means any 60-minute period commencing on the hour.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.

Owner or operator means any person who owns, leases, operates, controls, or supervises a stationary source.

Part 70 permit means any permit issued, renewed, or revised pursuant to part 70 of this chapter.

Performance audit means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Permit modification means a change to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permit revision means any permit modification or administrative permit amendment to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permitting authority means:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

Reconstruction means the replacement of components of an affected or a previously unaffected stationary source to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

Regulation promulgation schedule means the schedule for the promulgation of emission standards under this part, established by the Administrator pursuant to section 112(e) of the Act and published in the Federal Register.

Relevant standard means:

(1) An emission standard;

(2) An alternative emission standard;

(3) An alternative emission limitation; or

(4) An equivalent emission limitation established pursuant to section 112 of the Act that applies to the stationary source, the group of stationary sources, or the portion of a stationary source regulated by such standard or limitation.

A relevant standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the Administrator (or a State) establishes for new or existing sources to which such standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act includes **subpart** A of this part and all applicable appendices of this part or of other parts of this chapter that are referenced in that standard.

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Administrator.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).

(4) or affected sources (as defined in this part) applying for or subject to a title V permit: "responsible official" shall have the same meaning as defined in part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever is applicable.

Run means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in this part.

Shutdown means the cessation of operation of an affected source for any purpose.

Six-minute period means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period.

Standard conditions means a temperature of 293 K (68 deg. F) and a pressure of 101.3 kilopascals (29.92 in. Hg).

Startup means the setting in operation of an affected source for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement:

(1) The provisions of this part and/or

(2) The permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Test method means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of this chapter, test methods incorporated by reference in this part, or methods validated for an application through procedures in Method 301 of appendix A of this part.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Visible emission means the observation of an emission of opacity or optical density above the threshold of vision.

Sec. 63.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

A = ampere
g = gram
Hz = hertz
J = joule
°K = degree Kelvin
kg = kilogram
l = liter
m = meter
m_3 = cubic meter
mg = milligram = 10^{-3} gram
ml = milliliter = 10^{-3} liter
mm = millimeter = 10^{-3} meter
Mg = megagram = 10^{6} gram = metric ton
MJ = megajoule
mol = mole
N = newton
ng = nanogram = 10^{-9} gram
nm = nanometer = 10^{-9} meter
Pa = pascal
s = second
V = volt
W = watt
Ω = ohm
μg = microgram = 10^{-6} gram
μl = microliter = 10^{-6} liter

(b) Other units of measure:

Btu = British thermal unit
°C = degree Celsius (centigrade)
cal = calorie
cfm = cubic feet per minute
cc = cubic centimeter
cu ft = cubic feet
d = day
dcf = dry cubic feet
dcm = dry cubic meter
dscf = dry cubic feet at standard conditions
dscm = dry cubic meter at standard conditions
eq = equivalent
°F degree Fahrenheit
ft = feet
ft^2 = square feet
ft^3 = cubic feet
gal = gallon
gr = grain
g-eq = gram equivalent

g-mole = gram mole
hr = hour
in. = inch
in. H_2O = inches of water
K = 1,000
kcal = kilocalorie
lb = pound
lpm = liter per minute
meq = milliequivalent
min = minute
MW = molecular weight
oz = ounces
ppb = parts per billion
ppbw = parts per billion by weight
ppbv = parts per billion by volume
ppm = parts per million
ppmw = parts per million by weight
ppmv = parts per million by volume
psia = pounds per square inch absolute
psig = pounds per square inch gage
°R = degree Rankine
scf = cubic feet at standard conditions
scfh = cubic feet at standard conditions per hour
scm = cubic meter at standard conditions
sec = second
sq ft = square feet
std = at standard conditions
v/v = volume per volume
yd^2 = square yards
yr = year

(c) Miscellaneous:

act = actual
avg = average
I.D. = inside diameter
M = molar
N = normal
O.D. = outside diameter
% = percent

Sec. 63.4 Prohibited activities and circumvention.

(a) Prohibited activities.

(1) No owner or operator subject to the provisions of this part shall operate any affected source in violation of the requirements of this part except under--

(i) An extension of compliance granted by the Administrator under this part; or

(ii) An extension of compliance granted under this part by a State with an approved permit program; or

(iii) An exemption from compliance granted by the President under section 112(i)(4) of the Act.

(2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

(3) After the effective date of an approved permit program in a State, no owner or operator of an affected source in that State who is required under this part to obtain a title V permit shall operate such source except in compliance with the provisions of this part and the applicable requirements of the permit program in that State.

(4) [Reserved]

(5) An owner or operator of an affected source who is subject to an emission standard promulgated under this part shall comply with the requirements of that standard by the date(s) established in the applicable **subpart**(s) of this part (including this **subpart**) regardless of whether--

(i) A title V permit has been issued to that source; or

(ii) If a title V permit has been issued to that source, whether such permit has been revised or modified to incorporate the emission standard.

(b) Circumvention. No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to--

(1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;

(2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and

(3) The fragmentation of an operation such that the operation avoids regulation by a relevant standard.

(c) Severability. Notwithstanding any requirement incorporated into a title V permit obtained by an owner or operator subject to the provisions of this part, the provisions of this part are federally enforceable.

Sec. 63.5 Construction and reconstruction.

(a) Applicability.

(1) This section implements the preconstruction review requirements of section 112(i)(1) for sources subject to a relevant emission standard that has been promulgated in this part. In addition, this section includes other requirements for constructed and reconstructed stationary sources that are or become subject to a relevant promulgated emission standard.

(2) After the effective date of a relevant standard promulgated under this part, the requirements in this section apply to owners or operators who construct a new source or reconstruct a source after the proposal date of that standard. New or reconstructed sources that start up before the standard's effective date are not subject to the preconstruction review requirements specified in paragraphs (b)(3), (d), and (e) of this section.

(b) Requirements for existing, newly constructed, and reconstructed sources.

(1) Upon construction an affected source is subject to relevant standards for new sources, including compliance dates. Upon reconstruction, an affected source is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

(2) [Reserved]

(3) After the effective date of any relevant standard promulgated by the Administrator under this part, whether or not an approved permit program is effective in the State in which an affected source is (or would be) located, no person may construct a new major affected source or reconstruct a major affected source subject to such standard, or reconstruct a major source such that the source becomes a major affected source subject to the standard, without obtaining written approval, in advance, from the Administrator in accordance with the procedures specified in paragraphs (d) and (e) of this section.

(4) After the effective date of any relevant standard promulgated by the Administrator under this part, whether or not an approved permit program is effective in the State in which an affected source is (or would be) located, no person may construct a new affected source or reconstruct an affected source subject to such standard, or reconstruct a source such that the source becomes an affected source subject to the standard, without notifying the Administrator of the intended construction or reconstruction. The notification shall be submitted in accordance with the procedures in Sec. 63.9(b) and shall include all the information required for an application for approval of construction or reconstruction as specified in paragraph (d) of this section. For major sources, the application for approval of construction or reconstruction may be used to fulfill the notification requirements of this paragraph.

(5) After the effective date of any relevant standard promulgated by the Administrator under this part, whether or not an approved permit program is effective in the State in which an affected source is located, no person may operate such source without complying with the provisions of this **subpart** and the relevant standard unless that person has received an extension of compliance or an exemption from compliance under Sec. 63.6(i) or Sec. 63.6(j) of this **subpart**.

(6) After the effective date of any relevant standard promulgated by the Administrator under this part, whether or not an approved permit program is effective in the State in which an affected source is located, equipment added (or a process change) to an affected source that is within the scope of the definition of affected source under the relevant standard shall be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source. If a new affected source is added to the facility, the new affected source shall be subject to all the provisions of the relevant standard that are established for new sources including compliance dates.

(c) [Reserved]

(d) Application for approval of construction or reconstruction. The provisions of this paragraph implement section 112(i)(1) of the Act.

(1) General application requirements.

(i) An owner or operator who is subject to the requirements of paragraph (b)(3) of this section shall submit to the Administrator an application for approval of the construction of a new major affected source, the reconstruction of a major affected source, or the reconstruction of a major source such that the source becomes a major affected source subject to the standard. The application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date of the relevant standard) if the construction or reconstruction commences after the effective date of a relevant standard promulgated in this part. The application shall be submitted as soon as practicable before startup but no later than 60 days after the effective date of a relevant standard promulgated in this part if the construction or reconstruction had commenced and initial startup had not occurred before the standard's effective date. The application for approval of construction or reconstruction may be used to fulfill the initial notification requirements of Sec. 63.9(b)(5) of this **subpart**. The owner or operator may submit the application for approval well in advance of the date construction or reconstruction is planned to commence in order to ensure a timely review by the Administrator and that the planned commencement date will not be delayed.

(ii) A separate application shall be submitted for each construction or reconstruction. Each application for approval of construction or reconstruction shall include at a minimum:

(A) The applicant's name and address;

(B) A notification of intention to construct a new major affected source or make any physical or operational change to a major affected source that may meet or has been determined to meet the criteria for a reconstruction, as defined in Sec. 63.2;

(C) The address (i.e., physical location) or proposed address of the source;

(D) An identification of the relevant standard that is the basis of the application;

(E) The expected commencement date of the construction or reconstruction;

(F) The expected completion date of the construction or reconstruction;

(G) The anticipated date of (initial) startup of the source;

(H) The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified in the relevant standard, or if actual emissions data are not yet available, an estimate of the type and quantity of hazardous air pollutants expected to be emitted by the source reported in units and averaging times specified in the relevant standard. The owner or operator may submit percent reduction information if a relevant standard is established in terms of percent reduction. However, operating parameters, such as flow rate, shall be included in the submission to the extent that they demonstrate performance and compliance; and

(I) [Reserved]

(J) Other information as specified in paragraphs (d)(2) and (d)(3) of this section.

(iii) An owner or operator who submits estimates or preliminary information in place of the actual emissions data and analysis required in paragraphs (d)(1)(ii)(H) and (d)(2) of this section shall submit the actual, measured emissions data and other correct information as soon as available but no later than with the notification of compliance status required in Sec. 63.9(h) (see Sec. 63.9(h)(5)).

(2) Application for approval of construction. Each application for approval of construction shall include, in addition to the information required in paragraph (d)(1)(ii) of this section, technical information describing the proposed nature, size,

design, operating design capacity, and method of operation of the source, including an identification of each point of emission for each hazardous air pollutant that is emitted (or could be emitted) and a description of the planned air pollution control system (equipment or method) for each emission point. The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations. An owner or operator who submits approximations of control efficiencies under this subparagraph shall submit the actual control efficiencies as specified in paragraph (d)(1)(iii) of this section.

(3) Application for approval of reconstruction. Each application for approval of reconstruction shall include, in addition to the information required in paragraph (d)(1)(ii) of this section--

(i) A brief description of the affected source and the components that are to be replaced;

(ii) A description of present and proposed emission control systems (i.e., equipment or methods). The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations;

(iii) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;

(iv) The estimated life of the affected source after the replacements; and

(v) A discussion of any economic or technical limitations the source may have in complying

with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.

(vi) If in the application for approval of reconstruction the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or other requirements, the owner or operator need not submit the information required in subparagraphs (d)(3)(iii) through (v) of this section, above.

(4) Additional information. The Administrator may request additional relevant information after the submittal of an application for approval of construction or reconstruction.

(e) Approval of construction or reconstruction.

(1) (i) If the Administrator determines that, if properly constructed, or reconstructed, and operated, a new or existing source for which an application under paragraph (d) of this section was submitted will not cause emissions in violation of the relevant standard(s) and any other federally enforceable requirements, the Administrator will approve the construction or reconstruction.

(ii) In addition, in the case of reconstruction, the Administrator's determination under this paragraph will be based on:

(A) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new source;

(B) The estimated life of the source after the replacements compared to the life of a comparable entirely new source;

(C) The extent to which the components being replaced cause or contribute to the emissions from the source; and

(D) Any economic or technical limitations on compliance with relevant standards that are inherent in the proposed replacements.

(2) (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of construction or reconstruction within 60 calendar days after receipt of sufficient information to evaluate an application submitted under paragraph (d) of this section. The 60-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(3) Before denying any application for approval of construction or reconstruction, the Administrator will notify the applicant of the Administrator's intention to issue the denial together with--

(i) Notice of the information and findings on which the intended denial is based; and

(ii) Notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator to enable further action on the application.

(4) A final determination to deny any application for approval will be in writing and will specify the grounds on which the denial is based. The final

determination will be made within 60 calendar days of presentation of additional information or arguments (if the application is complete), or within 60 calendar days after the final date specified for presentation if no presentation is made.

(5) Neither the submission of an application for approval nor the Administrator's approval of construction or reconstruction shall--

(i) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(ii) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(f) Approval of construction or reconstruction based on prior State preconstruction review.

(1) The Administrator may approve an application for construction or reconstruction specified in paragraphs (b)(3) and (d) of this section if the owner or operator of a new or reconstructed source who is subject to such requirement demonstrates to the Administrator's satisfaction that the following conditions have been (or will be) met:

(i) The owner or operator of the new or reconstructed source has undergone a preconstruction review and approval process in the State in which the source is (or would be) located before the promulgation date of the relevant standard and has received a federally enforceable construction permit that contains a finding that the source will meet the relevant emission standard as proposed, if the source is properly built and operated;

(ii) In making its finding, the State has considered factors substantially equivalent to those specified in paragraph (e)(1) of this section; and either

(iii) The promulgated standard is no more stringent than the proposed standard in any relevant aspect that would affect the Administrator's decision to approve or disapprove an application for approval of construction or reconstruction under this section; or

(iv) The promulgated standard is more stringent than the proposed standard but the owner or operator will comply with the standard as proposed during the 3-year period immediately following the effective date of the standard as allowed for in Sec. 63.6(b)(3) of this **subpart**.

(2) The owner or operator shall submit to the Administrator the request for approval of construction or reconstruction under this paragraph no later than the application deadline specified in paragraph (d)(1) of this section (see also Sec. 63.9(b)(2) of this **subpart**). The owner or operator shall include in the request information sufficient for the Administrator's determination. The Administrator will evaluate the owner or operator's request in accordance with the procedures specified in paragraph (e) of this section. The Administrator may request additional relevant information after the submittal of a request for approval of construction or reconstruction under this paragraph.

Sec. 63.6 Compliance with standards and maintenance requirements.

(a) Applicability.

(1) The requirements in this section apply to owners or operators of affected sources for which any relevant standard has been established pursuant to section 112 of the Act unless--

(i) The Administrator (or a State with an approved permit program) has granted an extension of compliance consistent with paragraph (i) of this section; or

(ii) The President has granted an exemption from compliance with any relevant standard in accordance with section 112(i)(4) of the Act.

(2) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source, such source shall be subject to the relevant emission standard or other requirement.

(b) Compliance dates for new and reconstructed sources.

(1) Except as specified in paragraphs (b)(3) and (b)(4) of this section, the owner or operator of a new or reconstructed source that has an initial startup before the effective date of a relevant standard established under this part pursuant to section 112(d), 112(f), or 112(h) of the Act shall comply with such standard not later than the standard's effective date.

(2) Except as specified in paragraphs (b)(3) and (b)(4) of this section, the owner or operator of a new or reconstructed source that has an initial startup after the effective date of a relevant standard established under this part pursuant to section 112(d), 112(f), or 112(h) of the Act shall comply with such standard upon startup of the source.

(3) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established under this part pursuant to section 112(d), 112(f), or 112(h) of the Act but before the effective date (that is, promulgation) of such standard shall comply with the relevant emission standard not later than the date 3 years after the effective date if:

(i) The promulgated standard (that is, the relevant standard) is more stringent than the proposed standard; and

(ii) The owner or operator complies with the standard as proposed during the 3-year period immediately after the effective date.

(4) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of a relevant standard established pursuant to section 112(f) shall comply with the emission standard under section 112(f) not later than the date 10 years after the date construction or reconstruction is commenced, except that, if the section 112(f) standard is promulgated more than 10 years after construction or reconstruction is commenced, the owner or operator shall comply with the standard as provided in paragraphs (b)(1) and (b)(2) of this section.

(5) The owner or operator of a new source that is subject to the compliance requirements of paragraph (b)(3) or paragraph (b)(4) of this section shall notify the

Administrator in accordance with Sec. 63.9(d) of this **subpart**.

(6) [Reserved]

(7) After the effective date of an emission standard promulgated under this part, the owner or operator of an unaffected new area source (i.e., an area source for which construction or reconstruction was commenced after the proposal date of the standard) that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source that is subject to the emission standard, shall comply with the relevant emission standard immediately upon becoming a major source. This compliance date shall apply to new area sources that become affected major sources regardless of whether the new area source previously was affected by that standard. The new affected major source shall comply with all requirements of that standard that affect new sources.

(c) Compliance dates for existing sources.

(1) After the effective date of a relevant standard established under this part pursuant to section 112(d) or 112(h) of the Act, the owner or operator of an existing source shall comply with such standard by the compliance date established by the Administrator in the applicable **subpart**(s) of this part. Except as otherwise provided for in section 112 of the Act, in no case will the compliance date established for an existing source in an applicable **subpart** of this part exceed 3 years after the effective date of such standard.

(2) After the effective date of a relevant standard established under this part pursuant to section 112(f) of the Act, the owner or operator of an existing source shall comply with such standard not later than 90 days after the standard's effective date unless the Administrator has granted an extension to the source under paragraph (i)(4)(ii) of this section.

(3)-(4) [Reserved]

(5) After the effective date of an emission standard promulgated under this part, the owner or operator of an unaffected existing area source that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source that is subject to the emission standard shall comply by the date specified in the standard for

existing area sources that become major sources. If no such compliance date is specified in the standard, the source shall have a period of time to comply with the relevant emission standard that is equivalent to the compliance period specified in that standard for other existing sources. This compliance period shall apply to existing area sources that become affected major sources regardless of whether the existing area source previously was affected by that standard. Notwithstanding the previous two sentences, however, if the existing area source becomes a major source by the addition of a new affected source or by reconstructing, the portion of the existing facility that is a new affected source or a reconstructed source shall comply with all requirements of that standard that affect new sources, including the compliance date for new sources.

(d) [Reserved]

(e) Operation and maintenance requirements.

(1) (i) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.

(ii) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

(2) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

(3) Startup, shutdown, and malfunction plan.

(i) The owner or operator of an affected source shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard. As required under Sec. 63.8(c)(1)(i), the plan shall identify all routine or otherwise predictable CMS malfunctions. This plan shall be developed by the owner or operator by the source's compliance date for that relevant standard. The plan shall be incorporated by reference into the source's title V permit. The purpose of the startup, shutdown, and malfunction plan is to--

(A) Ensure that, at all times, owners or operators operate and maintain affected sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards;

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(ii) During periods of startup, shutdown, and malfunction, the owner or operator of an affected source shall operate and maintain such source (including associated air pollution control equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (e)(3)(i) of this section.

(iii) When actions taken by the owner or operator during a startup, shutdown, or malfunction

(including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall keep records for that event that demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping, that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the owner or operator shall keep records of these events as specified in Sec. 63.10(b) (and elsewhere in this part), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in Sec. 63.10(d)(5).

(iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall record the actions taken for that event and shall report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with Sec. 63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator (see Sec. 63.10(d)(5)(ii))).

(v) The owner or operator shall keep the written startup, shutdown, and malfunction plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the affected source is no longer subject to the provisions of this part. In addition, if the startup, shutdown, and malfunction plan is revised, the owner or operator shall keep previous (i.e.,

superseded) versions of the startup, shutdown, and malfunction plan on record, to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan.

(vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Administrator.

(vii) Based on the results of a determination made under paragraph (e)(2) of this section, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

(A) Does not address a startup, shutdown, or malfunction event that has occurred;

(B) Fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards; or

(C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.

(viii) If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator shall revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed

procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control equipment.

(f) Compliance with nonopacity emission standards—

(1) Applicability. The nonopacity emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable **subpart**.

(2) Methods for determining compliance.

(i) The Administrator will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in Sec. 63.7, unless otherwise specified in an applicable **subpart** of this part.

(ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in Sec. 63.6(e) and applicable subparts of this part.

(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if--

(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

(B) The performance test was conducted under representative operating conditions for the source;

(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in Sec. 63.7(e) of this **subpart**; and

(D) The performance test was appropriately quality-assured, as specified in Sec. 63.7(c) of this **subpart**.

(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.

(3) Finding of compliance. The Administrator will make a finding concerning an affected source's compliance with a nonopacity emission standard, as specified in paragraphs (f)(1) and (f)(2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable) and any information available to the Administrator needed to determine whether proper operation and maintenance practices are being used.

(g) Use of an alternative nonopacity emission standard.

(1) If, in the Administrator's judgment, an owner or operator of an affected source has established that an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant from an affected source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act, the Administrator will publish in the Federal Register a notice permitting the use of the alternative emission standard for purposes of compliance with the promulgated standard. Any Federal Register notice under this paragraph shall be published only after the public is notified and given the opportunity to comment. Such notice will restrict the permission to the stationary source(s) or category(ies) of sources from which the alternative emission standard will achieve equivalent emission reductions. The

Administrator will condition permission in such notice on requirements to assure the proper operation and maintenance of equipment and practices required for compliance with the alternative emission standard and other requirements, including appropriate quality assurance and quality control requirements, that are deemed necessary.

(2) An owner or operator requesting permission under this paragraph shall, unless otherwise specified in an applicable **subpart**, submit a proposed test plan or the results of testing and monitoring in accordance with Sec. 63.7 and Sec. 63.8, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring. Any testing or monitoring conducted to request permission to use an alternative nonopacity emission standard shall be appropriately quality assured and quality controlled, as specified in Sec. 63.7 and Sec. 63.8.

(3) The Administrator may establish general procedures in an applicable **subpart** that accomplish the requirements of paragraphs (g)(1) and (g)(2) of this section.

(h) Compliance with opacity and visible emission standards—

(1) Applicability. The opacity and visible emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable **subpart**.

(2) Methods for determining compliance.

(i) The Administrator will determine compliance with opacity and visible emission standards in this part based on the results of the test method specified in an applicable **subpart**. Whenever a continuous opacity monitoring system (COMS) is required to be installed to determine compliance with numerical opacity emission standards in this part, compliance with opacity emission standards in this part shall be determined by using the results from the COMS. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in this part shall be determined by conducting observations in accordance with Test Method 9 in appendix A of part 60 of this chapter or the method specified in paragraph (h)(7)(ii) of this section. Whenever a visible emission test

method is not specified, compliance with visible emission standards in this part shall be determined by conducting observations in accordance with Test Method 22 in appendix A of part 60 of this chapter.

(ii) [Reserved]

(iii) If an affected source undergoes opacity or visible emission testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if--

(A) The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard;

(B) The opacity or visible emission test was conducted under representative operating conditions for the source;

(C) The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in Sec. 63.7(e) of this **subpart**; and

(D) The opacity or visible emission test was appropriately quality-assured, as specified in Sec. 63.7(c) of this section.

(3) [Reserved]

(4) Notification of opacity or visible emission observations. The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting opacity or visible emission observations in accordance with Sec. 63.9(f), if such observations are required for the source by a relevant standard.

(5) Conduct of opacity or visible emission observations. When a relevant standard under this part includes an opacity or visible emission standard, the owner or operator of an affected source shall comply with the following:

(i) For the purpose of demonstrating initial compliance, opacity or visible emission

observations shall be conducted concurrently with the initial performance test required in Sec. 63.7 unless one of the following conditions applies:

(A) If no performance test under Sec. 63.7 is required, opacity or visible emission observations shall be conducted within 60 days after achieving the maximum production rate at which a new or reconstructed source will be operated, but not later than 120 days after initial startup of the source, or within 120 days after the effective date of the relevant standard in the case of new sources that start up before the standard's effective date. If no performance test under Sec. 63.7 is required, opacity or visible emission observations shall be conducted within 120 days after the compliance date for an existing or modified source; or

(B) If visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under Sec. 63.7, or within the time period specified in paragraph (h)(5)(i)(A) of this section, the source's owner or operator shall reschedule the opacity or visible emission observations as soon after the initial performance test, or time period, as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. The rescheduled opacity or visible emission observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under Sec. 63.7. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity or visible emission observations from being made concurrently with the initial performance test in accordance with procedures contained in Test Method 9 or Test Method 22 in appendix A of part 60 of this chapter.

(ii) For the purpose of demonstrating initial compliance, the minimum total time of opacity observations shall be 3 hours (30 6-minute

averages) for the performance test or other required set of observations (e.g., for fugitive-type emission sources subject only to an opacity emission standard).

(iii) The owner or operator of an affected source to which an opacity or visible emission standard in this part applies shall conduct opacity or visible emission observations in accordance with the provisions of this section, record the results of the evaluation of emissions, and report to the Administrator the opacity or visible emission results in accordance with the provisions of Sec. 63.10(d).

(iv) [Reserved]

(v) Opacity readings of portions of plumes that contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity emission standards.

(6) Availability of records. The owner or operator of an affected source shall make available, upon request by the Administrator, such records that the Administrator deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.

(7) Use of a continuous opacity monitoring system.

(i) The owner or operator of an affected source required to use a continuous opacity monitoring system (COMS) shall record the monitoring data produced during a performance test required under Sec. 63.7 and shall furnish the Administrator a written report of the monitoring results in accordance with the provisions of Sec. 63.10(e)(4).

(ii) Whenever an opacity emission test method has not been specified in an applicable **subpart**, or an owner or operator of an affected source is required to conduct Test Method 9 observations (see appendix A of part 60 of this chapter), the owner or operator may submit, for compliance purposes, COMS data results produced during any performance test required under Sec. 63.7 in lieu of Method 9 data. If the owner or operator elects to submit COMS data for compliance with the opacity emission standard, he or she shall notify the Administrator of that decision, in

writing, simultaneously with the notification under Sec. 63.7(b) of the date the performance test is scheduled to begin. Once the owner or operator of an affected source has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent performance tests required under Sec. 63.7, unless the owner or operator notifies the Administrator in writing to the contrary not later than with the notification under Sec. 63.7(b) of the date the subsequent performance test is scheduled to begin.

(iii) For the purposes of determining compliance with the opacity emission standard during a performance test required under Sec. 63.7 using COMS data, the COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test.

(iv) The owner or operator of an affected source using a COMS for compliance purposes is responsible for demonstrating that he/she has complied with the performance evaluation requirements of Sec. 63.8(e), that the COMS has been properly maintained, operated, and data quality-assured, as specified in Sec. 63.8(c) and Sec. 63.8(d), and that the resulting data have not been altered in any way.

(v) Except as provided in paragraph (h)(7)(ii) of this section, the results of continuous monitoring by a COMS that indicate that the opacity at the time visual observations were made was not in excess of the emission standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the affected source proves that, at the time of the alleged violation, the instrument used was properly maintained, as specified in Sec. 63.8(c), and met Performance Specification 1 in appendix B of part 60 of this chapter, and that the resulting data have not been altered in any way.

(8) Finding of compliance. The Administrator will make a finding concerning an affected source's compliance with an opacity or visible emission standard upon obtaining all the compliance information required by the relevant standard (including the written reports of the results of the performance tests required by Sec. 63.7, the results of Test Method 9 or another

required opacity or visible emission test method, the observer certification required by paragraph (h)(6) of this section, and the continuous opacity monitoring system results, whichever is/are applicable) and any information available to the Administrator needed to determine whether proper operation and maintenance practices are being used.

(9) Adjustment to an opacity emission standard.

(i) If the Administrator finds under paragraph (h)(8) of this section that an affected source is in compliance with all relevant standards for which initial performance tests were conducted under Sec. 63.7, but during the time such performance tests were conducted fails to meet any relevant opacity emission standard, the owner or operator of such source may petition the Administrator to make appropriate adjustment to the opacity emission standard for the affected source. Until the Administrator notifies the owner or operator of the appropriate adjustment, the relevant opacity emission standard remains applicable.

(ii) The Administrator may grant such a petition upon a demonstration by the owner or operator that--

(A) The affected source and its associated air pollution control equipment were operated and maintained in a manner to minimize the opacity of emissions during the performance tests;

(B) The performance tests were performed under the conditions established by the Administrator; and

(C) The affected source and its associated air pollution control equipment were incapable of being adjusted or operated to meet the relevant opacity emission standard.

(iii) The Administrator will establish an adjusted opacity emission standard for the affected source meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity emission standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate

the new opacity emission standard in the Federal Register.

(iv) After the Administrator promulgates an adjusted opacity emission standard for an affected source, the owner or operator of such source shall be subject to the new opacity emission standard, and the new opacity emission standard shall apply to such source during any subsequent performance tests.

(i) Extension of compliance with emission standards.

(1) Until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of this part.

(2) Extension of compliance for early reductions and other reductions—

(i) Early reductions. Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of **subpart** D of this part, the Administrator (or the State with an approved permit program) will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in **subpart** D.

(ii) Other reductions. Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) (as defined in section 169(3) of the Act) or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.

(3) Request for extension of compliance. Paragraphs (i)(4) through (i)(7) of this section concern requests for an extension of compliance with a relevant standard under this part (except requests for an extension of compliance under paragraph (i)(2)(i) of this section will be handled through procedures specified in **subpart** D of this part).

(4) (i) (A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 1-year extension of compliance is insufficient to dry and cover mining waste in order to reduce emissions of any hazardous air pollutant. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and who is otherwise required to obtain a title V permit shall apply for such permit or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) Any request under this paragraph for an extension of compliance with a relevant standard shall be submitted in writing to the appropriate authority not later than 12 months before the affected source's compliance date (as specified in paragraphs (b) and (c) of this section) for sources that are not including

emission points in an emissions average, or not later than 18 months before the affected source's compliance date (as specified in paragraphs (b) and (c) of this section) for sources that are including emission points in an emissions average. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards, e.g., a compliance date specified by the standard is less than 12 (or 18) months after the standard's effective date.

(ii) The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 15 calendar days after the effective date of the relevant standard.

(5) The owner or operator of an existing source that has installed BACT or technology required to meet LAER [as specified in paragraph (i)(2)(ii) of this section] prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants)

that would be controlled at that source by the relevant emission standard.

(6) (i) The request for a compliance extension under paragraph (i)(4) of this section shall include the following information:

(A) A description of the controls to be installed to comply with the standard;

(B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

(1) The date by which contracts for emission control systems or process changes for emission control will be awarded, or the date by which orders will be issued for the purchase of component parts to accomplish emission control or process changes;

(2) The date by which on-site construction, installation of emission control equipment, or a process change is to be initiated;

(3) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and

(4) The date by which final compliance is to be achieved;

(C) A description of interim emission control steps that will be taken during the extension period, including milestones to assure proper operation and maintenance of emission control and process equipment; and

(D) Whether the owner or operator is also requesting an extension of other applicable requirements (e.g., performance testing requirements).

(ii) The request for a compliance extension under paragraph (i)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the

installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(7) Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).

(8) Approval of request for extension of compliance. Paragraphs (i)(9) through (i)(14) of this section concern approval of an extension of compliance requested under paragraphs (i)(4) through (i)(6) of this section.

(9) Based on the information provided in any request made under paragraphs (i)(4) through (i)(6) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with an emission standard, as specified in paragraphs (i)(4) and (i)(5) of this section.

(10) The extension will be in writing and will--

(i) Identify each affected source covered by the extension;

(ii) Specify the termination date of the extension;

(iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;

(iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and

(v) (A) Under paragraph (i)(4), specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period; or

(B) Under paragraph (i)(5), specify any additional conditions that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.

(11) The owner or operator of an existing source that has been granted an extension of compliance under

paragraph (i)(10) of this section may be required to submit to the Administrator (or the State with an approved permit program) progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (i)(10) of this section.

(12) (i) The Administrator (or the State with an approved permit program) will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(i) or (i)(5) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application s not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of the Administrator's (or the State's) intention to issue the denial, together with--

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15

calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator (or the State) before further action on the request.

(iv) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(13) (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(ii) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 15 calendar days after receipt of the original application and within 15 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with--

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.

(iv) A final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(14) The Administrator (or the State with an approved permit program) may terminate an extension of compliance at an earlier date than specified if any specification under paragraphs (i)(10)(iii) or (i)(10)(iv) of this section is not met.

15) [Reserved]

16) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.

(j) Exemption from compliance with emission standards. The President may exempt any stationary source from compliance with any relevant standard established pursuant to section 112 of the Act for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years.

Sec. 63.7 Performance testing requirements.

(a) Applicability and performance test dates.

(1) Unless otherwise specified, this section applies to the owner or operator of an affected source required to do performance testing, or another form of compliance demonstration, under a relevant standard.

(2) If required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of paragraph (c)(3)(ii)(B) of this section apply, the owner or operator of the affected source shall perform such tests as follows--

(i) Within 180 days after the effective date of a relevant standard for a new source that has an initial startup date before the effective date; or

(ii) Within 180 days after initial startup for a new source that has an initial startup date after the effective date of a relevant standard; or

(iii) Within 180 days after the compliance date specified in an applicable **subpart** of this part for an existing source subject to an emission standard established pursuant to section 112(d) of the Act, or within 180 days after startup of an existing source if the source begins operation after the effective date of the relevant emission standard; or

(iv) Within 180 days after the compliance date for an existing source subject to an emission standard established pursuant to section 112(f) of the Act; or

(v) Within 180 days after the termination date of the source's extension of compliance for an existing source that obtains an extension of compliance under Sec. 63.6(i); or

(vi) Within 180 days after the compliance date for a new source, subject to an emission standard established pursuant to section 112(f) of the Act, for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of the relevant standard established pursuant to section 112(f) [see Sec. 63.6(b)(4)]; or

(vii) [Reserved]; or

(viii) [Reserved]; or

(ix) When an emission standard promulgated under this part is more stringent than the standard proposed (see Sec. 63.6(b)(3)), the owner or

operator of a new or reconstructed source subject to that standard for which construction or reconstruction is commenced between the proposal and promulgation dates of the standard shall comply with performance testing requirements within 180 days after the standard's effective date, or within 180 days after startup of the source, whichever is later. If the promulgated standard is more stringent than the proposed standard, the owner or operator may choose to demonstrate compliance with either the proposed or the promulgated standard. If the owner or operator chooses to comply with the proposed standard initially, the owner or operator shall conduct a second performance test within 3 years and 180 days after the effective date of the standard, or after startup of the source, whichever is later, to demonstrate compliance with the promulgated standard.

(3) The Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act.

(b) Notification of performance test.

(1) The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator, upon request, to review and approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test. Observation of the performance test by the Administrator is optional.

(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in paragraph (b)(1) of this section, due to unforeseeable circumstances beyond his or her control, the owner or operator shall notify the Administrator within 5 days prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable Federal, State, or local requirement, nor will it prevent the

Administrator from implementing or enforcing this part or taking any other action under the Act.

(c) Quality assurance program.

(1) The results of the quality assurance program required in this paragraph will be considered by the Administrator when he/she determines the validity of a performance test.

(2) (i) Submission of site-specific test plan. Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples.

(iii) The external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test. The PA's consist of blind audit samples provided by the Administrator and analyzed during the performance test in order to provide a measure of test data bias. The external QA program may also include systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iv) The owner or operator of an affected source shall submit the site-specific test plan to the Administrator upon the Administrator's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under paragraph (b) of this section, or on a mutually agreed upon date.

(v) The Administrator may request additional relevant information after the submittal of a site-specific test plan.

(3) Approval of site-specific test plan.

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under paragraph (c)(3)(i)(B) of this section. Before disapproving any site-specific test plan, the Administrator will notify the applicant of the Administrator's intention to disapprove the plan together with--

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Administrator before final action on the plan.

(ii) In the event that the Administrator fails to approve or disapprove the site-specific test plan within the time period specified in paragraph (c)(3)(i) of this section, the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard, the owner or operator shall conduct the performance test within the time specified in this section using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator shall refrain from conducting the performance test until the Administrator approves the use of the alternative method when the Administrator approves the site-specific test plan (if

review of the site-specific test plan is requested) or until after the alternative method is approved (see paragraph (f) of this section). If the Administrator does not approve the site-specific test plan (if review is requested) or the use of the alternative method within 30 days before the test is scheduled to begin, the performance test dates specified in paragraph (a) of this section may be extended such that the owner or operator shall conduct the performance test within 60 calendar days after the Administrator approves the site-specific test plan or after use of the alternative method is approved. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(iii) Neither the submission of a site-specific test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall--

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) (i) Performance test method audit program. The owner or operator shall analyze performance audit (PA) samples during each performance test. The owner or operator shall request performance audit materials 45 days prior to the test date. Cylinder audit gases, if available, must be obtained from the appropriate EPA Regional Office or from the responsible enforcement authority and analyzed in conjunction with the field samples.

(ii) The Administrator will have sole discretion to require any subsequent remedial actions of the owner or operator based on the PA results.

(iii) If the Administrator fails to provide required PA materials to an owner or operator of an affected source in time to analyze the PA samples during a performance test, the requirement to conduct a PA under this paragraph shall be waived for such source for that performance test. Waiver under this paragraph of the requirement to conduct a PA for a particular performance test does not constitute a waiver of the requirement to conduct a PA for future required performance tests.

(d) Performance testing facilities. If required to do performance testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source, shall provide performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such source. This includes:

(i) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

(ii) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;

(2) Safe sampling platform(s);

(3) Safe access to sampling platform(s);

(4) Utilities for sampling and testing equipment; and

(5) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.

(e) Conduct of performance tests.

(1) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall

emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under Sec. 63.6(e). Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(2) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61, and 63 of this chapter unless the Administrator--

(i) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology; or

(ii) Approves the use of an alternative test method, the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or

(iii) Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors; or

(iv) Waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

(3) Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run in the event that--

(i) A sample is accidentally lost after the testing team leaves the site; or

(ii) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or

iii) Extreme meteorological conditions occur; or

iv) Other circumstances occur that are beyond the owner or operator's control.

(4) Nothing in paragraphs (e)(1) through (e)(3) of this section shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(f) Use of an alternative test method -

(1) General. Until permission to use an alternative test method has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) The owner or operator of an affected source required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the owner or operator--

(i) Notifies the Administrator of his or her intention to use an alternative test method not later than with the submittal of the site-specific test plan (if requested by the Administrator) or at least 60 days before the performance test is scheduled to begin if a site-specific test plan is not submitted;

(ii) Uses Method 301 in appendix A of this part to validate the alternative test method; and

(iii) Submits the results of the Method 301 validation process along with the notification of intention and the justification for not using the specified test method. The owner or operator may submit the information required in this paragraph well in advance of the deadline specified in paragraph (f)(2)(i) of this section to ensure a timely review by the Administrator in order to meet the performance test date specified in this section or the relevant standard.

(3) The Administrator will determine whether the owner or operator's validation of the proposed alternative test method is adequate when the Administrator approves or disapproves the site-specific test plan

required under paragraph (c) of this section. If the Administrator finds reasonable grounds to dispute the results obtained by the Method 301 validation process, the Administrator may require the use of a test method specified in a relevant standard.

(4) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the Administrator may require the use of a test method specified in a relevant standard.

(5) If the owner or operator uses an alternative test method for an affected source during a required performance test, the owner or operator of such source shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the Administrator to use another test method as allowed under Sec. 63.7(f).

(6) Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the owner or operator's responsibility to comply with the requirements of this part.

(g) Data analysis, recordkeeping, and reporting.

(1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is "completed" when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator (see Sec. 63.9(i)). The results of the performance test shall be submitted as part of the notification of compliance status required under Sec. 63.9(h). Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority.

(2) [Reserved]

(3) For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Administrator the records or results of such performance test and other data needed to determine emissions from an affected source.

(h) Waiver of performance tests.

(1) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) Request to waive a performance test.

(i) If a request is made for an extension of compliance under Sec. 63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under paragraph (c) of this section is not submitted.

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report [such as those required under Sec. 63.6(i), Sec. 63.9(h), and Sec. 63.10(e) or specified in a relevant standard or in the source's title V permit], but it shall be submitted at least 60 days before the performance test if the site-specific test

plan required under paragraph (c) of this section is not submitted.

(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

(4) Approval of request to waive performance test. The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (h)(3) of this section when he/she--

(i) Approves or denies an extension of compliance under Sec. 63.6(i)(8); or

(ii) Approves or disapproves a site-specific test plan under Sec. 63.7(c)(3); or

(iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

[59 FR 12430, Mar. 16, 1994, as amended at 65 FR 62215, Oct. 17, 2000]

Sec. 63.8 Monitoring requirements.

(a) Applicability.

(1) (i) Unless otherwise specified in a relevant standard, this section applies to the owner or operator of an affected source required to do monitoring under that standard.

(ii) Relevant standards established under this part will specify monitoring systems, methods, or procedures, monitoring frequency, and other pertinent requirements for source(s) regulated by those standards. This section specifies

general monitoring requirements such as those governing the conduct of monitoring and requests to use alternative monitoring methods. In addition, this section specifies detailed requirements that apply to affected sources required to use continuous monitoring systems (CMS) under a relevant standard.

(2) For the purposes of this part, all CMS required under relevant standards shall be subject to the provisions of this section upon promulgation of performance specifications for CMS as specified in the relevant standard or otherwise by the Administrator.

(3) [Reserved]

(4) Additional monitoring requirements for control devices used to comply with provisions in relevant standards of this part are specified in Sec. 63.11.

(b) Conduct of monitoring.

(1) Monitoring shall be conducted as set forth in this section and the relevant standard(s) unless the Administrator--

(i) Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures; or

(ii) Approves the use of alternatives to any monitoring requirements or procedures.

(iii) Owners or operators with flares subject to Sec. 63.11(b) are not subject to the requirements of this section unless otherwise specified in the relevant standard.

(2) (i) When the effluents from a single affected source, or from two or more affected sources, are combined before being released to the atmosphere, the owner or operator shall install an applicable CMS on each effluent.

(ii) If the relevant standard is a mass emission standard and the effluent from one affected source is released to the atmosphere through more than one point, the owner or operator shall install an applicable CMS at each emission point unless the installation of fewer systems is--

(A) Approved by the Administrator; or

(B) Provided for in a relevant standard (e.g., instead of requiring that a CMS be installed at each emission point before the effluents from those points are channeled to a common control device, the standard specifies that only one CMS is required to be installed at the vent of the control device).

(3) When more than one CMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CMS. However, when one CMS is used as a backup to another CMS, the owner or operator shall report the results from the CMS used to meet the monitoring requirements of this part. If both such CMS are used during a particular reporting period to meet the monitoring requirements of this part, then the owner or operator shall report the results from each CMS for the relevant compliance period.

(c) Operation and maintenance of continuous monitoring systems.

(1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices.

(i) The owner or operator of an affected source shall ensure the immediate repair or replacement of CMS parts to correct "routine" or otherwise predictable CMS malfunctions as defined in the source's startup, shutdown, and malfunction plan required by Sec. 63.6(e)(3). The owner or operator shall keep the necessary parts for routine repairs of the affected equipment readily available. If the plan is followed and the CMS repaired immediately, this action shall be reported in the semiannual startup, shutdown, and malfunction report required under Sec. 63.10(d)(5)(i).

(ii) For those malfunctions or other events that affect the CMS and are not addressed by the startup, shutdown, and malfunction plan, the owner or operator shall report actions that are not consistent with the startup, shutdown, and malfunction plan within 24 hours after commencing actions inconsistent with the plan. The owner or operator shall send a follow-up report within 2 weeks after commencing actions inconsistent with the plan that either

certifies that corrections have been made or includes a corrective action plan and schedule. The owner or operator shall provide proof that repair parts have been ordered or any other records that would indicate that the delay in making repairs is beyond his or her control.

(iii) The Administrator's determination of whether acceptable operation and maintenance procedures are being used will be based on information that may include, but is not limited to, review of operation and maintenance procedures, operation and maintenance records, manufacturing recommendations and specifications, and inspection of the CMS. Operation and maintenance procedures written by the CMS manufacturer and other guidance also can be used to maintain and operate each CMS.

(2) All CMS shall be installed such that representative measurements of emissions or process parameters from the affected source are obtained. In addition, CEMS shall be located according to procedures contained in the applicable performance specification(s).

(3) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under Sec. 63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

(4) Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(i) All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(ii) All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(5) Unless otherwise approved by the Administrator, minimum procedures for COMS shall include a method for producing a simulated zero opacity condition and an upscale (high-level) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of all the analyzer's internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly normally used in the measurement of opacity.

(6) The owner or operator of a CMS installed in accordance with the provisions of this part and the applicable CMS performance specification(s) shall check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (e)(3)(ii) of this section. The zero (low-level) and high-level calibration drifts shall be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system must allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For COMS, all optical and instrumental surfaces exposed to the effluent gases shall be cleaned prior to performing the zero (low-level) and high-level drift adjustments; the optical surfaces and instrumental surfaces shall be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4 percent opacity.

(7) (i) A CMS is out of control if--

(A) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or

(B) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or

(C) The COMS CD exceeds two times the limit in the applicable performance specification in the relevant standard.

(ii) When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

(8) The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in Sec. 63.10(e)(3).

(d) Quality control program.

(1) The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

(2) The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

(i) Initial and any subsequent calibration of the CMS;

(ii) Determination and adjustment of the calibration drift of the CMS;

(iii) Preventive maintenance of the CMS, including spare parts inventory;

(iv) Data recording, calculations, and reporting;

(v) Accuracy audit procedures, including sampling and analysis methods; and

(vi) Program of corrective action for a malfunctioning CMS.

(3) The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CMS, these written procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and recordkeeping efforts.

(e) Performance evaluation of continuous monitoring systems—

(1) General. When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

(2) Notification of performance evaluation. The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under Sec. 63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

(3) (i) Submission of site-specific performance evaluation test plan. Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iii) The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the Administrator (if requested) at least 60 days before the performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test plan by the Administrator will occur with the review and approval of the site-specific test plan (if review of the site-specific test plan is requested).

(iv) The Administrator may request additional relevant information after the submittal of a site-specific performance evaluation test plan.

(v) In the event that the Administrator fails to approve or disapprove the site-specific performance evaluation test plan within the time period specified in Sec. 63.7(c)(3), the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the monitoring method(s) specified in the

relevant standard, the owner or operator shall conduct the performance evaluation within the time specified in this **subpart** using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to a monitoring method specified in the relevant standard, the owner or operator shall refrain from conducting the performance evaluation until the Administrator approves the use of the alternative method. If the Administrator does not approve the use of the alternative method within 30 days before the performance evaluation is scheduled to begin, the performance evaluation deadlines specified in paragraph (e)(4) of this section may be extended such that the owner or operator shall conduct the performance evaluation within 60 calendar days after the Administrator approves the use of the alternative method. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance evaluation as required in this section (without the Administrator's prior approval of the site-specific performance evaluation test plan) if he/she subsequently chooses to use the specified monitoring method(s) instead of an alternative.

(vi) Neither the submission of a site-specific performance evaluation test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator' failure to approve or disapprove a plan in a timely manner shall--

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) Conduct of performance evaluation and performance evaluation dates. The owner or operator of an

affected source shall conduct a performance evaluation of a required CMS during any performance test required under Sec. 63.7 in accordance with the applicable performance specification as specified in the relevant standard. Notwithstanding the requirement in the previous sentence, if the owner or operator of an affected source elects to submit COMS data for compliance with a relevant opacity emission standard as provided under Sec. 63.6(h)(7), he/she shall conduct a performance evaluation of the COMS as specified in the relevant standard, before the performance test required under Sec. 63.7 is conducted in time to submit the results of the performance evaluation as specified in paragraph (e)(5)(ii) of this section. If a performance test is not required, or the requirement for a performance test has been waived under Sec. 63.7(h), the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in Sec. 63.7(a), or as otherwise specified in the relevant standard.

(5) Reporting performance evaluation results.

(i) The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation simultaneously with the results of the performance test required under Sec. 63.7 or within 60 days of completion of the performance evaluation if no test is required, unless otherwise specified in a relevant standard. The Administrator may request that the owner or operator submit the raw data from a performance evaluation in the report of the performance evaluation results.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under Sec. 63.7 and described in Sec. 63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation under this paragraph. The copies shall be provided at least 15 calendar days before the performance test required under Sec. 63.7 is conducted.

(f) Use of an alternative monitoring method—

(1) General. Until permission to use an alternative monitoring method has been granted by the

Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following:

(i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;

(ii) Alternative monitoring requirements when the affected source is infrequently operated;

(iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;

(iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;

(v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;

(vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;

(vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;

(viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such

demonstration be performed for each affected source; or

(ix) Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.

(3) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.

(4) (i) Request to use alternative monitoring method. An owner or operator who wishes to use an alternative monitoring method shall submit an application to the Administrator as described in paragraph (f)(4)(ii) of this section, below. The application may be submitted at any time provided that the monitoring method is not used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring method is to be used to demonstrate compliance with a relevant standard, the application shall be submitted not later than with the site-specific test plan required in Sec. 63.7(c) (if requested) or with the site-specific performance evaluation plan (if requested) or at least 60 days before the performance evaluation is scheduled to begin.

(ii) The application shall contain a description of the proposed alternative monitoring system and a performance evaluation test plan, if required, as specified in paragraph (e)(3) of this section. In addition, the application shall include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

(iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in

paragraph (f)(4)(i) above to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.

(5) Approval of request to use alternative monitoring method.

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with--

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (f)(5)(i) of this section.

(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (f)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by Sec. 63.8(f).

(6) Alternative to the relative accuracy test. An alternative to the relative accuracy test for CEMS

specified in a relevant standard may be requested as follows:

(i) Criteria for approval of alternative procedures. An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (f)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements in Sec. 63.7, or other tests performed following the criteria in Sec. 63.7, demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

(ii) Petition to use alternative to relative accuracy test. The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

(iii) Rescission of approval to use alternative to relative accuracy test. The Administrator will review the permission to use an

alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

(g) Reduction of monitoring data.

(1) The owner or operator of each CMS shall reduce the monitoring data as specified in this paragraph. In addition, each relevant standard may contain additional requirements for reducing monitoring data. When additional requirements are specified in a relevant standard, the standard will identify any unnecessary or duplicated requirements in this paragraph that the owner or operator need not comply with.

(2) The owner or operator of each COMS shall reduce all data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-

hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in Sec. 63.2.

(3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant).

(4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(5) Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any data average computed under this part. For owners or operators complying with the requirements of Sec. 63.10(b)(2)(vii) (A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999]

Sec. 63.9 Notification requirements.

(a) Applicability and general information.

(1) The requirements in this section apply to owners and operators of affected sources that are subject to the provisions of this part, unless specified otherwise in a relevant standard.

(2) For affected sources that have been granted an extension of compliance under **subpart** D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a notice that contains all the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State

to satisfy the requirements of this section for that notification.

(4) (i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in Sec. 63.13).

(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.

(b) Initial notifications.

(1) (i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard.

(ii) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source shall be subject to the notification requirements of this section.

(iii) Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under Sec. 63.5(d) of this **subpart**, if relevant, to

fulfill the initial notification requirements of this paragraph.

(2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:

(i) The name and address of the owner or operator;

(ii) The address (i.e., physical location) of the affected source;

(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;

(iv) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant, or if a definitive identification is not yet possible, a preliminary identification of each point of emission for each hazardous air pollutant; and

(v) A statement of whether the affected source is a major source or an area source.

(3) The owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of a relevant standard under this part and for which an application for approval of construction or reconstruction is not required under Sec. 63.5(d), shall notify the Administrator in writing that the source is subject to the relevant standard no later than 120 days after initial startup. The notification shall provide all the information required in paragraphs (b)(2)(i) through (b)(2)(v) of this section, delivered or postmarked with the notification required in paragraph (b)(5).

(4) The owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of a relevant standard under this part and for which an application for approval of

construction or reconstruction is required under Sec. 63.5(d) shall provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new major affected source, reconstruct a major affected source, or reconstruct a major source such that the source becomes a major affected source with the application for approval of construction or reconstruction as specified in Sec. 63.5(d)(1)(i);

(ii) A notification of the date when construction or reconstruction was commenced, submitted simultaneously with the application for approval of construction or reconstruction, if construction or reconstruction was commenced before the effective date of the relevant standard;

(iii) A notification of the date when construction or reconstruction was commenced, delivered or postmarked not later than 30 days after such date, if construction or reconstruction was commenced after the effective date of the relevant standard;

(iv) [Reserved]

(v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(5) After the effective date of any relevant standard established by the Administrator under this part, whether or not an approved permit program is effective in the State in which an affected source is (or would be) located, an owner or operator who intends to construct a new affected source or reconstruct an affected source subject to such standard, or reconstruct a source such that it becomes an affected source subject to such standard, shall notify the Administrator, in writing, of the intended construction or reconstruction. The notification shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date of the relevant standard) if the construction or reconstruction commences after the effective date of a relevant standard promulgated in this part. The notification shall be submitted as soon as practicable before startup but no later than 60 days after the effective date of a relevant standard promulgated in this part if the construction

or reconstruction had commenced and initial startup had not occurred before the standard's effective date. The notification shall include all the information required for an application for approval of construction or reconstruction as specified in Sec. 63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill the requirements of this paragraph.

(c) Request for extension of compliance. If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with Sec. 63.6(i)(5) of this **subpart**, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in Sec. 63.6(i)(4) through Sec. 63.6(i)(6).

(d) Notification that source is subject to special compliance requirements. An owner or operator of a new source that is subject to special compliance requirements as specified in Sec. 63.6(b)(3) and Sec. 63.6(b)(4) shall notify the Administrator of his/her compliance obligations not later than the notification dates established in paragraph (b) of this section for new sources that are not subject to the special provisions.

(e) Notification of performance test. The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under Sec. 63.7(c), if requested by the Administrator, and to have an observer present during the test.

(f) Notification of opacity and visible emission observations. The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in Sec. 63.6(h)(5), if such observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in paragraph (e) of this section, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under Sec. 63.7, the owner or operator shall deliver or postmark the notification not less than 30 days before the opacity or visible emission observations are scheduled to take place.

(g) Additional notification requirements for sources with continuous monitoring systems. The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows:

(1) A notification of the date the CMS performance evaluation under Sec. 63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under Sec. 63.7(b). If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under Sec. 63.7(h), the owner or operator shall notify the Administrator in writing of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin;

(2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by Sec. 63.7 in lieu of Method 9 or other opacity emissions test method data, as allowed by Sec. 63.6(h)(7)(ii), if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin; and

(3) A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by Sec. 63.8(f)(6), has been exceeded. The notification shall be delivered or postmarked not later than 10 days after the occurrence of such exceedance, and it shall include a description of the nature and cause of the increased emissions.

(h) Notification of compliance status.

(1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.

(2) (i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the

relevant standard. The notification shall list--

(A) The methods that were used to determine compliance;

(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;

(E) An analysis demonstrating whether the affected source is a major source or an area source (using the emissions data generated for this notification);

(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and

(G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

(ii) The notification shall be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in a relevant standard, in which case the letter shall be sent before the close of business on the day the report of the relevant testing or

monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations.

(3) After a title V permit has been issued to the owner or operator of an affected source, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.

(4) [Reserved]

(5) If an owner or operator of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in Sec. 63.5(d) in place of the actual emissions data or control efficiencies required in paragraphs (d)(1)(ii)(H) and (d)(2) of Sec. 63.5, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

(6) Advice on a notification of compliance status may be obtained from the Administrator.

(i) Adjustment to time periods or postmark deadlines for submittal and review of required communications.

(1) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (i)(2) and (i)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (i)(2) and (i)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

(j) Change in information already provided. Any change in the information already provided under this section shall be provided to the Administrator in writing within 15 calendar days after the change.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999]

Sec. 63.10 Recordkeeping and reporting requirements.

(a) Applicability and general information.

(1) The requirements of this section apply to owners or operators of affected sources who are subject to the provisions of this part, unless specified otherwise in a relevant standard.

(2) For affected sources that have been granted an extension of compliance under **subpart** D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a report that contains all the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(4) (i) Before a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in Sec. 63.13).

(ii) After a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph

(a)(4)(i) of this section. The Regional Office may waive this requirement for any reports at its discretion.

(5) If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. Procedures governing the implementation of this provision are specified in Sec. 63.9(i).

(6) If an owner or operator supervises one or more stationary sources affected by more than one standard established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the implementation of this provision are specified in Sec. 63.9(i).

(7) If an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60, part 61, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the applicable part 60 or part 61

standard, whichever is latest. Procedures governing the implementation of this provision are specified in Sec. 63.9(i).

(b) General recordkeeping requirements.

(1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of--

(i) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

(ii) The occurrence and duration of each malfunction of the air pollution control equipment;

(iii) All maintenance performed on the air pollution control equipment;

(iv) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see Sec. 63.6(e)(3));

(v) All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see Sec. 63.6(e)(3)) when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual

manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);

(vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);

(vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all

subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

(ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

(x) All CMS calibration checks;

(xi) All adjustments and maintenance performed on CMS;

(xii) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this part, if the source has been granted a waiver under paragraph (f) of this section;

(xiii) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under Sec. 63.8(f)(6); and

(xiv) All documentation supporting initial notifications and notifications of compliance status under Sec. 63.9.

(3) Recordkeeping requirement for applicability determinations. If an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants is not subject to a relevant standard or other requirement established under this part, the owner or operator shall keep a record of the applicability

determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination shall include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) shall be sufficiently detailed to allow the Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis shall be performed in accordance with requirements established in subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any.

(c) Additional recordkeeping requirements for sources with continuous monitoring systems. In addition to complying with the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of--

(1) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);

(2)-(4) [Reserved]

(5) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

(6) The date and time identifying each period during which the CMS was out of control, as defined in Sec. 63.8(c)(7);

(7) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;

(8) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s),

that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;

(9) [Reserved]

(10) The nature and cause of any malfunction (if known);

(11) The corrective action taken or preventive measures adopted;

(12) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

(13) The total process operating time during the reporting period; and

(14) All procedures that are part of a quality control program developed and implemented for CMS under Sec. 63.8(d).

(15) In order to satisfy the requirements of paragraphs (c)(10) through (c)(12) of this section and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in Sec. 63.6(e), provided that such plan and records adequately address the requirements of paragraphs (c)(10) through (c)(12).

(d) General reporting requirements.

(1) Notwithstanding the requirements in this paragraph or paragraph (e) of this section, the owner or operator of an affected source subject to reporting requirements under this part shall submit reports to the Administrator in accordance with the reporting requirements in the relevant standard(s).

(2) Reporting results of performance tests. Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under Sec. 63.7 to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required performance test to the appropriate permitting authority. The owner or operator of an affected source shall report the results of the performance test to the Administrator (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified

otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status required under Sec. 63.9(h).

(3) Reporting results of opacity or visible emission observations. The owner or operator of an affected source required to conduct opacity or visible emission observations by a relevant standard shall report the opacity or visible emission results (produced using Test Method 9 or Test Method 22, or an alternative to these test methods) along with the results of the performance test required under Sec. 63.7. If no performance test is required, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the performance test required under Sec. 63.7, the owner or operator shall report the opacity or visible emission results before the close of business on the 30th day following the completion of the opacity or visible emission observations.

(4) Progress reports. The owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under Sec. 63.6(i) shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(5) (i) Periodic startup, shutdown, and malfunction reports. If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan [see Sec. 63.6(e)(3)], the owner or operator shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and

malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

(ii) Immediate startup, shutdown, and malfunction reports. Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the

circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph are specified in Sec. 63.9(i).

(e) Additional reporting requirements for sources with continuous monitoring systems—

(1) General. When more than one CEMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CEMS.

(2) Reporting results of continuous monitoring system performance evaluations.

(i) The owner or operator of an affected source required to install a CMS by a relevant standard shall furnish the Administrator a copy of a written report of the results of the CMS performance evaluation, as required under Sec. 63.8(e), simultaneously with the results of the performance test required under Sec. 63.7, unless otherwise specified in the relevant standard.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under Sec. 63.7 and described in Sec. 63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation conducted under Sec. 63.8(e). The copies shall be furnished at least 15 calendar days before the performance test required under Sec. 63.7 is conducted.

(3) Excess emissions and continuous monitoring system performance report and summary report.

(i) Excess emissions and parameter monitoring exceedances are defined in relevant standards. The owner or operator of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Administrator semiannually, except when--

(A) More frequent reporting is specifically required by a relevant standard;

(B) The Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or

(C) [Reserved]

(ii) Request to reduce frequency of excess emissions and continuous monitoring system performance reports. Notwithstanding the frequency of reporting requirements specified in paragraph (e)(3)(i) of this section, an owner or operator who is required by a relevant standard to submit excess emissions and continuous monitoring system performance (and summary) reports on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(A) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected source's excess emissions and continuous monitoring system performance reports continually demonstrate that the source is in compliance with the relevant standard;

(B) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this **subpart** and the relevant standard; and

(C) The Administrator does not object to a reduced frequency of reporting for the affected source, as provided in paragraph (e)(3)(iii) of this section.

(iii) The frequency of reporting of excess emissions and continuous monitoring system performance (and summary) reports required to comply with

a relevant standard may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the 5-year recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(iv) As soon as CMS data indicate that the source is not in compliance with any emission limitation or operating parameter specified in the relevant standard, the frequency of reporting shall revert to the frequency specified in the relevant standard, and the owner or operator shall submit an excess emissions and continuous monitoring system performance (and summary) report for the noncomplying emission points at the next appropriate reporting period following the noncomplying event. After demonstrating ongoing compliance with the relevant standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard, as provided for in paragraphs (e)(3)(ii) and (e)(3)(iii) of this section.

(v) Content and submittal dates for excess emissions and monitoring system performance reports. All excess emissions and monitoring system performance reports and all summary

reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of this section, in Sec. 63.8(c)(7) and Sec. 63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

(vi) Summary report. As required under paragraphs (e)(3)(vii) and (e)(3)(viii) of this section, one summary report shall be submitted for the hazardous air pollutants monitored at each affected source (unless the relevant standard specifies that more than one summary report is required, e.g., one summary report for each hazardous air pollutant monitored). The summary report shall be entitled "Summary Report--Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance" and shall contain the following information:

(A) The company name and address of the affected source;

(B) An identification of each hazardous air pollutant monitored at the affected source;

(C) The beginning and ending dates of the reporting period;

(D) A brief description of the process units;

(E) The emission and operating parameter limitations specified in the relevant standard(s);

(F) The monitoring equipment manufacturer(s) and model number(s);

(G) The date of the latest CMS certification or audit;

(H) The total operating time of the affected source during the reporting period;

(I) An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

(J) A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

(K) A description of any changes in CMS, processes, or controls since the last reporting period;

(L) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

(M) The date of the report.

(vii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period,

only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the Administrator.

(viii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.

(4) Reporting continuous opacity monitoring system data produced during a performance test. The owner or operator of an affected source required to use a COMS shall record the monitoring data produced during a performance test required under Sec. 63.7 and shall furnish the Administrator a written report of the monitoring results. The report of COMS data shall be submitted simultaneously with the report of the performance test results required in paragraph (d)(2) of this section.

(f) Waiver of recordkeeping or reporting requirements.

(1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under Sec. 63.6(i), any required compliance progress report or compliance status report required under this part (such as under Sec. 63.6(i) and Sec. 63.9(h)) or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section,

whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.

(4) The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she--

(i) Approves or denies an extension of compliance; or

(ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.

(6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999]

Sec. 63.11 Control device requirements.

(a) Applicability. This section contains requirements for control devices used to comply with provisions in relevant standards. These requirements apply only to affected sources covered by relevant standards referring directly or indirectly to this section.

(b) Flares.

(1) Owners or operators using flares to comply with the provisions of this part shall monitor these control devices to assure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators using flares shall monitor these control devices.

(2) Flares shall be steam-assisted, air-assisted, or non-assisted.

(3) Flares shall be operated at all times when emissions may be vented to them.

(4) Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in appendix A of part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22.

(5) Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(6) An owner/operator has the choice of adhering to the heat content specifications in paragraph (b)(6)(ii) of this section, and the maximum tip velocity specifications in paragraph (b)(7) or (b)(8) of this section, or adhering to the requirements in paragraph (b)(6)(i) of this section.

(i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume) or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity V_{max}, as determined by the following equation:

$$V_{max} = (X_{H2} - K_1) * K_2$$

Where:

V_{max} = Maximum permitted velocity, m/sec.
K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

X_{H2} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in Sec. 63.14).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (b)(7)(i) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 M/scm (200 Btu/scf) or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C.

K=Constant=

$$1.740 \times 10^{-7} \left(\frac{1}{\text{ppmv}}\right)\left(\frac{\text{g - mole}}{\text{scm}}\right)\left(\frac{\text{MJ}}{\text{kcal}}\right)$$

where the standard temperature for (g-mole/scm) is 20°C.

C_i = Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (incorporated by reference as specified in Sec. 63.14).

H_i = Net heat of combustion of sample component i, kcal/g-mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in Sec. 63.14) if published values are not available or cannot be calculated.

n = Number of sample components.

(7) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (b)(7)(ii) and (b)(7)(iii) of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60 of this chapter, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, less than the velocity V_{max}, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{max}, for flares complying with this paragraph shall be determined by the following equation:

$$Log_{10}(V_{max}) = (H_T + 28.8)/31.7$$

Where:

V_{max} = Maximum permitted velocity, m/sec.
28.8 = Constant.
31.7 = Constant.
H_T = The net heating value as determined in paragraph (b)(6) of this section.

(8) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity V_{max}. The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation:

$$V_{max} = 8.71 = 0.708(H_T)$$

Where:

V_{max} = Maximum permitted velocity, m/sec.

8.71 = Constant.

0.708= Constant.

H_T = The net heating value as determined in paragraph (b)(6)(ii) of this section.

[59 FR 12430, Mar. 16, 1994, as amended at 63 FR 24444, May 4, 1998; 65 FR 62215, Oct. 17, 2000]

Sec. 63.12 State authority and delegations. .

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from--

(1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;

(2) Requiring the owner or operator of an affected source to obtain permits, licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or

(3) Requiring emission reductions in excess of those specified in **subpart** D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.

(b) (1) Section 112(l) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards and other requirements pursuant to section 112 for stationary sources located in that State. Because of the unique nature of radioactive material, delegation of authority to implement and enforce standards that control radionuclides may require separate approval.

(2) **Subpart** E of this part establishes procedures consistent with section 112(l) for the approval of State rules or programs to implement and enforce applicable Federal rules promulgated under the authority of section 112. **Subpart** E also establishes procedures for the review and withdrawal of section

112 implementation and enforcement authorities granted through a section 112(l) approval.

(c) All information required to be submitted to the EPA under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain Federal or State reporting requirement. The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to the EPA and the State agency.

Sec. 63.13 Addresses of State air pollution control agencies and EPA Regional Offices.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated in the following list of EPA Regional Offices.

EPA Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Director, Air, Pesticides and Toxics Division, J.F.K. Federal Building, Boston, MA 02203-2211.

EPA Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, 26 Federal Plaza, New York, NY 10278.

EPA Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air, Radiation and Toxics Division, 841 Chestnut Street, Philadelphia, PA 19107.

EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee), Director, Air, Pesticides and Toxics, Management Division, 345 Courtland Street, N.E., Atlanta, GA 30365.

EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

EPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas), Director, Air, Pesticides and Toxics, 1445 Ross Avenue, Dallas, TX 75202-2733.

EPA Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air and Toxics Division, 726 Minnesota Avenue, Kansas City, KS 66101.

EPA Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming), Director, Air and Toxics Division, 999 18th Street, 1 Denver Place, Suite 500, Denver, CO 80202-2405.

EPA Region IX (Arizona, California, Hawaii, Nevada, American Samoa, Guam), Director, Air and Toxics Division, 75 Hawthorne Street, San Francisco, CA 94105.

EPA Region X (Alaska, Idaho, Oregon, Washington), Director, Office of Air Quality, 1200 Sixth Avenue (OAQ-107), Seattle, WA 98101.

(b) All information required to be submitted to the Administrator under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act. The owner or operator of an affected source may contact the appropriate EPA Regional Office for the mailing addresses for those States whose delegation requests have been approved.

(c) If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, an owner or operator may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

[59 FR 12430, Mar. 16, 1994, as amended at 63 FR 66061, Dec. 1, 1998]

Sec. 63.14 Incorporations by reference.

(a) The materials listed in this section are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on the date of the approval, and notice of any change in these materials will be published in the Federal Register. The materials are available for purchase at the corresponding addresses noted below, and all are available for inspection at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC, at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M St., SW., Washington, DC, and at the EPA Library (MD-35), U.S. EPA, Research Triangle Park, North Carolina.

(b) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 1916 Race Street,

Philadelphia, PA 19103; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(1) ASTM D523-89, Standard Test Method for Specular Gloss, IBR approved for Sec. 63.782.

(2) ASTM D1193-77, 91, Standard Specification for Reagent Water, IBR approved for Appendix A: Method 306, Sections 7.2.1 and 7.4.2.

(3) ASTM D1331-89, Standard Test Methods for Surface and Interfacial Tension of Solutions of Surface Active Agents, IBR approved for Appendix A: Method 306B, Sections 6.2, 11.1, and 12.2.2.

(4) ASTM D1475-90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for Sec. 63.788, Appendix A.

(5) ASTM D1946-77, 90, 94, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for Sec. 63.11(b)(6).

(6) ASTM D2369-93, 95, Standard Test Method for Volatile Content of Coatings, IBR approved for Sec. 63.788, Appendix A.

(7) ASTM D2382-76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for Sec. 63.11(b)(6).

(8) ASTM D2879-83, 96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for Sec. 63.111 of **Subpart** G.

(9) ASTM D3257-93, Standard Test Methods for Aromatics in Mineral Spirits by Gas Chromatography, IBR approved for Sec. 63.786(b).

(10) ASTM 3695-88, Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography, IBR approved for Sec. 63.365(e)(1) of **Subpart** O.

(11) ASTM D3792-91, Standard Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for Sec. 63.788, Appendix A.

(12) ASTM D3912-80, Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for Sec. 63.782.

(13) ASTM D4017-90, 96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for Sec. 63.788, Appendix A.

(14) ASTM D4082-89, Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants, IBR approved for Sec. 63.782.

(15) ASTM D4256-89, 94, Standard Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for Sec. 63.782.

(16) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for Sec. 63.11(b)(6).

(17) ASTM E180-93, Standard Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial Chemicals, IBR approved for Sec. 63.786(b).

(18) ASTM E260-91, 96, General Practice for Packed Column Gas Chromatography, IBR approved for Secs. 63.750(b)(2) and 63.786(b)(5).

(c) The materials listed below are available for purchase from the American Petroleum Institute (API), 1220 L Street, NW., Washington, DC 20005.

(1) API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989, IBR approved for Sec. 63.111 of **subpart** G of this part.

(2) API Publication 2518, Evaporative Loss from Fixed-roof Tanks, Second Edition, October 1991, IBR approved for Sec. 63.150(g)(3)(i)(C) of **subpart** G of this part.

(3) API Manual of Petroleum Measurement Specifications (MPMS) Chapter 19.2, Evaporative Loss From Floating-Roof Tanks (formerly API Publications 2517 and 2519), First Edition, April 1997, IBR approved for Sec. 63.1251 of **subpart** GGG of this part.

(d) State and Local Requirements. The materials listed below are available at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M St., SW., Washington, DC.

(1) California Regulatory Requirements Applicable to the Air Toxics Program, January 5, 1999, IBR approved for Sec. 63.99(a)(5)(ii) of **subpart** E of this part.

(2) Revisions to Puget Sound Clean Air Regulation III, section 3.03, Perchloroethylene Dry Cleaners adopted on November 9, 1995, IBR approved for section 63.99 (a)(47)(ii) of **subpart** E of this part.

(e) The materials listed below are available for purchase from the National Institute of Standards and Technology, Springfield, VA 22161, (800) 553-6847.

(1) Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices 1998, IBR approved for Sec. 63.1303(e)(3).

(2) [Reserved]

(f) The following material is available from the National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI), P. O. Box 133318, Research Triangle Park, NC 27709-3318 or at http://www.ncasi.org: NCASI Method DI/MEOH-94.02, Methanol in Process Liquids GC/FID (Gas Chromatography/Flame Ionization Detection), August 1998, Methods Manual, NCASI, Research Triangle Park, NC, IBR approved for Sec. 63.457(c)(3)(ii) of **subpart** S of this part.

(g) The materials listed below are available for purchase from AOAC International, Customer Services, Suite 400, 2200 Wilson Boulevard, Arlington, Virginia, 22201-3301, Telephone (703) 522-3032, Fax (703) 522-5468.

(1) AOAC Official Method 978.01 Phosphorus (Total) in Fertilizers, Automated Method, Sixteenth edition, 1995, IBR approved for Sec. 63.626(d)(3)(vi).

(2) AOAC Official Method 969.02 Phosphorus (Total) in Fertilizers, Alkalimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for Sec. 63.626(d)(3)(vi).

(3) AOAC Official Method 962.02 Phosphorus (Total) in Fertilizers, Gravimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for Sec. 63.626(d)(3)(vi).

(4) AOAC Official Method 957.02 Phosphorus (Total) in Fertilizers, Preparation of Sample Solution, Sixteenth edition, 1995, IBR approved for Sec. 63.626(d)(3)(vi).

(5) AOAC Official Method 929.01 Sampling of Solid Fertilizers, Sixteenth edition, 1995, IBR approved for Sec. 63.626(d)(3)(vi).

(6) AOAC Official Method 929.02 Preparation of Fertilizer Sample, Sixteenth edition, 1995, IBR approved for Sec. 63.626(d)(3)(vi).

(7) AOAC Official Method 958.01 Phosphorus (Total) in Fertilizers, Spectrophotometric Molybdovanadophosphate Method, Sixteenth edition, 1995, IBR approved for Sec. 63.626(d)(3)(vi).

(h) The materials listed below are available for purchase from The Association of Florida Phosphate Chemists, P.O. Box 1645, Bartow, Florida, 33830, Book of Methods Used and Adopted By The Association of Florida Phosphate Chemists, Seventh Edition 1991, IBR.

(1) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample, IBR approved for Sec. 63.606(c)(3)(ii) and Sec. 63.626(c)(3)(ii).

(2) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus--P_2O_5 or $Ca_3(PO_4)_2$, Method A-Volumetric Method, IBR approved for Sec. 63.606(c)(3)(ii) and Sec. 63.626(c)(3)(ii).

(3) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method B--Gravimetric Quimociac Method, IBR approved for Sec. 63.606(c)(3)(ii) and Sec. 63.626(c)(3)(ii).

(4) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method C--Spectrophotometric Method, IBR approved for Sec. 63.606(c)(3)(ii) and Sec. 63.626(c)(3)(ii).

(5) Section XI, Methods of Analysis for Phosphoric Acid, Super phosphate, Triple Super phosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method A--Volumetric Method, IBR approved for Sec. 63.606(c)(3)(ii), Sec. 63.626(c)(3)(ii), and Sec. 63.626(d)(3)(v).

(6) Section XI, Methods of Analysis for Phosphoric Acid, Super phosphate, Triple Super phosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method B--Gravimetric Quimociac Method, IBR approved for Sec. 63.606(c)(3)(ii), Sec. 63.626(c)(3)(ii), and Sec. 63.626(d)(3)(v).

(7) Section XI, Methods of Analysis for Phosphoric Acid, Super phosphate, Triple Super phosphate, and Ammonium

Phosphates, No. 3 Total Phosphorus-P_2O_5, Method C--Spectrophotometric Method, IBR approved for Sec. 63.606(c)(3)(ii), Sec. 63.626(c)(3)(ii), and Sec. 63.626(d)(3)(v).

[59 FR 12430, Mar. 16, 1994, as amended at 59 FR 19453, Apr. 22, 1994; 63 FR 50326, Sept. 21, 1998; 63 FR 53996, Oct. 7, 1998; 64 FR 4300, Jan. 28, 1999; 64 FR 17562, Apr. 12, 1999; 64 FR 31375, June 10, 1999; 65 FR 62215, Oct. 17, 2000; 66 FR 14324, Mar. 12, 2001]

Effective Date Note: At 66 FR 30822, June 8, 2001, Sec. 63.14 was amended by adding paragraph (d)(3) effective Aug. 8, 2001. For the convenience of the user, the added text appears as follows:

Sec. 63.14 Incorporation by Reference.

* * * * *

(d) * * *

(3) (i) Letter of June 7, 1999 to the U.S. Environmental Protection Agency Region 3 from the Delaware Department of Natural Resources and Environmental Control requesting formal full delegation to take over primary responsibility for implementation and enforcement of the Chemical Accident Prevention Program under Section 112(r) of the Clean Air Act Amendments of 1990.

(ii) Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management, Accidental Release Prevention Regulation, sections 1 through 5 and sections 7 through 14, effective January 11, 1999, IBR approved for Sec. 63.99(a)(8)(i) of **subpart** E of this part.

* * * * *

Sec. 63.15 Availability of information and confidentiality.

(a) Availability of information.

(1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available

to the public, consistent with protections recognized in section 503(e) of the Act.

(2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

(b) Confidentiality.

(1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.

(2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

40 CFR 63 Subpart GGGG--National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production

Source: 66 FR 19011, Apr. 12, 2001, unless otherwise noted.

What This Subpart Covers

Sec. 63.2830 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for emissions during vegetable oil production. This subpart limits hazardous air pollutant (HAP) emissions from specified vegetable oil production processes. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

Sec. 63.2831 Where can I find definitions of key words used in this subpart?

You can find definitions of key words used in this subpart in Sec. 63.2872.

Sec. 63.2832 Am I subject to this subpart?

(a) You are an affected source subject to this subpart if you meet all of the criteria listed in paragraphs (a)(1) and (2) of this section:

(1) You own or operate a vegetable oil production process that is a major source of HAP emissions or is collocated within a plant site with other sources that are individually or collectively a major source of HAP emissions.

(i) A vegetable oil production process is defined in Sec. 63.2872. In general, it is the collection of continuous process equipment and activities that produce crude vegetable oil and meal products by removing oil from oilseeds listed in Table 1 to Sec. 63.2840 through direct contact with an organic solvent, such as a hexane isomer blend.

(ii) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.

(2) Your vegetable oil production process processes any combination of eight types of oilseeds listed in paragraphs (a)(2)(i) through (viii) of this section:

(i) Corn germ;

(ii) Cottonseed;

(iii) Flax;

(iv) Peanut;

(v) Rapeseed (for example, canola);

(vi) Safflower;

(vii) Soybean; and

(viii) Sunflower.

(b) You are not subject to this subpart if your vegetable oil production process meets any of the criteria listed in paragraphs (b)(1) through (4) of this section:

(1) It uses only mechanical extraction techniques that use no organic solvent to remove oil from a listed oilseed.

(2) It uses only batch solvent extraction and batch desolventizing equipment.

(3) It processes only agricultural products that are not listed oilseeds as defined in Sec. 63.2872.

(4) It functions only as a research and development facility and is not a major source.

(c) As listed in Sec. 63.1(c)(5) of the General Provisions, if your HAP emissions increase such that you become a major source, then you are subject to all of the requirements of this subpart.

Sec. 63.2833 Is my source categorized as existing or new?

(a) This subpart applies to each existing and new affected source. You must categorize your vegetable oil production process as either an existing or a new source in accordance with the criteria in Table 1 of this section, as follows:

TABLE 1 TO § 63.2833.—CATEGORIZING YOUR SOURCE AS EXISTING OR NEW

If your affected source	And if	Then your affected source
(1) was constructed or began construction before May 26, 2000	reconstruction has not occurred	is an existing source
(2) began reconstruction, as defined in § 63.2, on or after May 26, 2000.	(i) reconstruction was part of a scheduled plan to comply with the existing source requirements of this subpart; and.	
	(ii) reconstruction was completed no later than 3 years after the effective date of this subpart.	remains an existing source.
(3) began a significant modification, as defined in § 63. 2872, at any time on an existing source.	the modification does not constitute re-construction.	remains an existing source.
(4) began a significant modification, as defined in § 63. 2872, at any time on a new source.	the modification does not constitute re-construction	remains a new source

If your affected source	And if	Then your affected source
(5) began reconstruction on or after May 26, 2000.	reconstruction was completed later than 3 years after the effective date of this subpart.	is a new source.
(6) began construction on or after May 26, 2000.		is a new source.

(b) Reconstruction of a source. Any affected source is reconstructed if components are replaced so that the criteria in the definition of reconstruction in Sec. 63.2 are satisfied. In general, a vegetable oil production process is reconstructed if the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost for constructing a new vegetable oil production process, and it is technically and economically feasible for the reconstructed source to meet the relevant new source requirements of this subpart. The effect of reconstruction on the categorization of your existing and new affected source is described in paragraphs (b)(1) and (2) of this section:

(1) After reconstruction of an existing source, the affected source is recategorized as a new source and becomes subject to the new source requirements of this subpart.

(2) After reconstruction of a new source, the affected source remains categorized as a new source and remains subject to the new source requirements of this subpart.

(c) Significant modification of a source. A significant modification to an affected source is a term specific to this subpart and is defined in Sec. 63.2872.

(1) In general, a significant modification to your source consists of adding new equipment or the modification of existing equipment within the affected source that significantly affects solvent losses from the affected source. Examples include adding or replacing extractors, desolventizer-toasters (conventional and specialty), and meal dryer-coolers. All other significant modifications must meet the criteria listed in paragraphs (c)(1)(i) and (ii) of this section:

(i) The fixed capital cost of the modification represents a significant percentage of the

fixed capital cost of building a comparable new vegetable oil production process.

(ii) It does not constitute reconstruction as defined in Sec. 63.2.

(2) A significant modification has no effect on the categorization of your source as existing and new. An existing source remains categorized as an existing source and subject to the existing source requirements of this subpart. A new source remains categorized as a new source and subject to the new source requirements of this subpart.

(d) Changes in the type of oilseed processed by your affected source does not affect the categorization of your source as new or existing. Recategorizing an affected source from existing to new occurs only when you add or modify process equipment within the source which meets the definition of reconstruction.

Sec. 63.2834 When do I have to comply with the standards in this subpart?

You must comply with this subpart in accordance with one of the schedules in Table 1 of this section, as follows:

TABLE 1 OF § 63.2834.—COMPLIANCE DATES FOR EXISTING AND NEW SOURCES

If your affected source is categorized as...	And if...	Then your compliance date is...
(a) an existing source.....	.....	3 years after the effective date of this subpart.
(b) a new source	you startup your affected source before the effective date of this subpart	the effective date of this subpart
(c) a new source	you startup your affected source on or after the effective date of this subpart.	your startup date.

Standards

Sec. 63.2840 What emission requirements must I meet?

(a) (1) The emission requirements limit the number of gallons of HAP lost per ton of listed oilseeds processed. For each operating month, you must calculate a compliance ratio which compares your actual HAP loss

to your allowable HAP loss for the previous 12 operating months as shown in Equation 1 of this section. An operating month, as defined in Sec. 63.2872, is any calendar month in which a source processes a listed oilseed, excluding any entire calendar month in which the source operated under an initial startup period subject to Sec. 63.2850(c)(2) or (d)(2) or a malfunction period subject to Sec. 63.2850(e)(2). Equation 1 of this section follows:

$$\text{Compliance Ratio} = \frac{\text{Actual HAP Loss}}{\text{Allowable HAP Loss}} \qquad \text{(Eq. 1)}$$

(2) Equation 1 of this section can also be expressed as a function of total solvent loss as shown in Equation 2 of this section. Equation 2 of this section follows:

$$\text{Compliance Ratio} = \frac{f * \text{Actual Solvent Loss}}{0.64 * \sum_{i=1}^{n} \left((\text{Oilseed})_i * (\text{SLF})_i\right)} \qquad \text{(Eq. 2)}$$

Where:

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in Sec. 63.2854, dimensionless.

0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in Sec. 63.2853.

Oilseed = Tons of each oilseed type "I" processed during the previous 12 operating months, as shown in Sec. 63.2855.

SLF = The corresponding solvent loss factor (gal/ton) for oilseed "i" listed in Table 1 of this section, as follows:

TABLE 1 OF § 63.2840.—OILSEED SOLVENT LOSS FACTORS FOR DETERMINING ALLOWABLE HAP LOSS

		Oilseed solvent loss factor (gal/ton)	
Type of oilseed process	A source that	Existing sources	New sources
(i) Corn Germ, Wet Milling	processes corn germ that has been separated from other corn components using a "wet" process of centrifuging a slurry steeped in a dilute sulfurous acid solution.	0.4	0.3
(ii) Corn Germ, Dry Milling	processes corn germ that has been separated from the other corn components using a "dry" process of mechanical chafing and air sifting.	0.7	0.7
(iii) Cottonseed, Large	processes 120,000 tons or more of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period	0.5	0.4
(iv) Cottonseed, Small	processes less than 120,000 tons of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period	0.7	0.4
(v) Flax	processes flax	0.6	0.6
(vi) Peanuts	processes peanuts	1.2	0.7
(vii) Rapeseed	processes rapeseed	0.7	0.3
(viii) Safflower	processes safflower	0.7	0.7
(ix) Soybean, Conventional	uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products.	0.2	0.2
(x) Soybean, Specialty	uses a special style desolventizer to produce soybean meal products for human and animal consumption	1.7	1.5

Type of oilseed process	A source that	Oilseed solvent loss factor (gal/ton)	
		Existing sources	New sources
(xi) Soybean, Combination Plant with Low Specialty Production	processes soybeans in both specialty and conventional desolventizers and the quantity of soy-beans processed in specialty desolventizers during normal operating periods is less than 3.3 percent of total soybeans processed during all normal operating periods in a 12 operating month period. The corresponding solvent loss factor is an overall value and applies to the total quantity of soybeans processed	0.25	0.25
(xii) Sunflower	processes sunflower	0.4	0.3

(b) When your source has processed listed oilseed for 12 operating months, calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2 of this section. When calculating your compliance ratio, consider the conditions and exclusions in paragraphs (b)(1) through (6) of this section:

(1) If your source processes any quantity of listed oilseeds in a calendar month and the source is not operating under an initial startup period or malfunction period subject to Sec. 63.2850, then you must categorize the month as an operating month, as defined in Sec. 63.2872.

(2) The 12-month compliance ratio may include operating months occurring prior to a source shutdown and operating months that follow after the source resumes operation.

(3) If your source shuts down and processes no listed oilseed for an entire calendar month, then you must categorize the month as a nonoperating month, as defined in Sec. 63.2872. Exclude any nonoperating months from the compliance ratio determination.

(4) If your source is subject to an initial startup period as defined in Sec. 63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the initial startup period.

(5) If your source is subject to a malfunction period as defined in Sec. 63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the malfunction period.

(6) For sources processing cottonseed or specialty soybean, the solvent loss factor you use to determine the compliance ratio may change each operating month depending on the tons of oilseed processed during all normal operating periods in a 12 operating month period.

(c) If the compliance ratio is less than or equal to 1.00, your source was in compliance with the HAP emission requirements for the previous operating month.

(d) To determine the compliance ratio in Equation 2 of this section, you must select the appropriate oilseed solvent loss factor from Table 1 of this section. First, determine whether your source is new or existing using Table 1 of Sec. 63.2833. Then, under the appropriate existing or new source column, select the oilseed solvent loss factor that corresponds to each type oilseed or process operation for each operating month.

Compliance Requirements

Sec. 63.2850 How do I comply with the hazardous air pollutant emission standards?

(a) General requirements. The requirements in paragraphs (a)(1)(i) through (iv) of this section apply to all affected sources:

(1) Submit the necessary notifications in accordance with Sec. 63.2860, which include:

(i) Initial notifications for existing sources.

(ii) Initial notifications for new and reconstructed sources.

(iii) Initial notifications for significant modifications to existing or new sources.

(iv) Notification of compliance status.

(2) Develop and implement a plan for demonstrating compliance in accordance with Sec. 63.2851.

(3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in Sec. 63.2852.

(4) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with Sec. 63.2862.

(5) Submit the reports in paragraphs (a)(5)(i) through (iii) of this section:

(i) Annual compliance certifications in accordance with Sec. 63.2861(a).

(ii) Periodic SSM reports in accordance with Sec. 63.2861(c).

(iii) Immediate SSM reports in accordance with Sec. 63.2861(d).

(6) Submit all notifications and reports and maintain all records required by the General Provisions for performance testing if you add a control device that destroys solvent.

(b) Existing sources under normal operation. You must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for existing sources under normal operation in Table 2 of this section.

(c) New sources. Your new source, including a source that is categorized as new due to reconstruction, must meet the requirements associated with one of two compliance options. Within 15 days of the startup date, you must choose to comply with one of the options listed in paragraph (c)(1) or (2) of this section:

(1) Normal operation. Upon startup of your new source, you must meet all of the requirements listed in Sec. 63.2850(a) and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for new sources under normal operation in Table 2 of this section.

(2) Initial startup period. For up to 6 calendar months after the startup date of your new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for new sources operating under an initial startup period in Table 2 of this section. After a maximum of 6 calendar months, your new source must then meet all of the requirements listed in Table 1 of this section for sources under normal operation.

(d) Existing or new sources that have been significantly modified. Your existing or new source that has been significantly modified must meet the requirements associated with one of two compliance options. Within 15 days of the modified source startup date, you must choose to comply with one of the options listed in paragraph (d)(1) or (2) of this section:

(1) Normal operation. Upon startup of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for an existing or new source that has been significantly modified in Table 2 of this section.

(2) Initial startup period. For up to 3 calendar months after the startup date of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for a significantly modified existing or new source operating under an initial startup period in Table 2 of this section. After a maximum of 3 calendar months, your new or existing source must meet all of the requirements listed in Table 1 of this section for sources under normal operation.

(e) Existing or new sources experiencing a malfunction. A malfunction is defined in Sec. 63.2. In general, it means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or process equipment to function in a usual manner. If your existing or new source experiences an unscheduled shutdown as a result of a malfunction, continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then you must meet the requirements associated with one of two compliance options. Routine or scheduled process startups and shutdowns resulting from, but not limited to, market demands, maintenance activities, and switching types of oilseed processed, are not startups or shutdowns resulting from a malfunction and, therefore, do not qualify for this provision. Within 15 days of the beginning date of the malfunction, you must choose to comply with one of the options listed in paragraphs (e)(1) through (2) of this section:

(1) Normal operation. Your source must meet all of the requirements listed in paragraph (a) of this section

and one of the options listed in paragraphs (e)(1)(i) through (iii) of this section:

(i) Existing source normal operation requirements in paragraph (b) of this section.

(ii) New source normal operation requirements in paragraph (c)(1) of this section.

(iii) Normal operation requirements for sources that have been significantly modified in paragraph (d)(1) of this section.

(2) Malfunction period. Throughout the malfunction period, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating during a malfunction period. At the end of the malfunction period, your source must then meet all of the requirements listed in Table 1 of this section for sources under normal operation. Table 1 of this section follows:

TABLE 1 OF § 63.2850.—REQUIREMENTS FOR COMPLIANCE WITH HAP EMISSION STANDARDS

Are you required to. . .	For periods of normal operation?	For initial startup periods subject to § 63.2850(c)(2) or (d)(2)?	For malfunction periods subject to § 63.2850(e)(2)?
(a) Operate and maintain your source in accordance with your SSM plan as described in § 63.2852?.	No, your source is not subject to the SSM plan, but rather the HAP emission limits of this standard.	Yes, throughout the entire initial startup period.	Yes, throughout the entire malfunction period.
(b) Determine and record the extraction solvent loss in gallons from your source?.	Yes, as described in § 63.2853.	Yes, as described in § 63. 2862(e).	Yes, as described in § 63.2862(e)
(c) Record the volume fraction of HAP present at greater than 1 percent by volume and gallons of extraction sol-vent in shipment received?.	Yes	Yes	Yes
(d) Determine and record the tons of each oilseed type processed by your source?.	Yes, as described in § 63.2855.	No	No

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Are you required to. . .	For periods of normal operation?	For initial startup periods subject to § 63.2850(c)(2) or (d)(2)?	For malfunction periods subject to § 63.2850(e)(2)?
(e) Determine the weighted average volume fraction of HAP in extraction solvent received as described in § 63.2854 by the end of the following calendar month?.	Yes	No. Except for solvent received by a new or reconstructed source commencing operation under an initial startup period, the HAP volume fraction in any solvent received during an initial startup period is included in the weighted average HAP determination for the next operating month.	No, the HAP volume fraction in any solvent received during a malfunction period is included in the weighted average HAP determination for the next operating month.
(f) Determine and record the actual solvent loss, weighted average volume fraction HAP, oilseed processed and compliance ratio for each 12 operating month period as described in § 63.2840 by the end of the following calendar month?.	Yes	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data re-corded for an initial startup period.	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data re-corded for a malfunction period.

Are you required to. . .	For periods of normal operation?	For initial startup periods subject to § 63.2850(c)(2) or (d)(2)?	For malfunction periods subject to § 63.2850(e)(2)?
(g) Submit a Notification of Compliance Status or Annual Compliance Certification as appropriate?.	Yes, as described in §§ 63.2860(d) and 63.2861(a).	No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification happens to occur during the initial startup period.	No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification happens to occur during the malfunction period.
h) Submit a Deviation Notification Report by the end of the calendar month following the month in which you determined that the compliance ratio exceeds 1.00 as described in § 63.2861(b)?.	Yes	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data re-corded for an initial startup period.	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data re-corded for a malfunction period.
(i) Submit a Periodic SSM Report as described in § 63 2861(c)?.	No, a SSM activity is not categorized as normal operation.	Yes	Yes
(j) Submit an Immediate SSM Report as described in § 63.2861(d)?	No, a SSM activity is not categorized as normal operation	Yes, only if your source does not follow the SSM plan	Yes, only if your source does not follow the SSM plan

TABLE 2 OF § 63.2850 — SCHEDULES FOR DEMONSTRATING COMPLIANCE UNDER VARIOUS SOURCE OPERATING MODES

If your source is	and is operating under	then your record-keeping schedule	You must determine your first compliance ratio by the end of the calendar month following	Base your first compliance ratio on information recorded
(a) Existing	Normal operation	Begins on the compliance date.	The first 12 operating months after the compliance date.	During the first 12 operating months after the compliance date.
(b) New	(1) Normal operation	Begins on the startup date of your new source.	The first 12 operating months after the startup date of the new source.	During the first 12 operating months after the startup date of the new source.
	(2) An initial startup period.	Begins on the startup date of your new source.	The first 12 operating months after termination of the initial startup period, which can last for up to 6 months.	During the first 12 operating months after the initial startup period, which can last for up to 6 months.

If your source is	and is operating under	then your record-keeping schedule	You must determine your first compliance ratio by the end of the calendar month following	Base your first compliance ratio on information recorded
(c) Existing or new that has been significantly modified	(1) Normal operation	Resumes on the start-up date of the modified source.	The first operating month after the start-up date of the modified source.	During the previous 11 operating months prior to the significant modification and the first operating month following the initial startup date of the source.
	(2) An initial startup period.	Resumes on the start-up date of the modified source.	The first operating month after termination of the initial startup period, which can last up to 3 months.	During the 11 operating months before the significant modification and the first operating month after the initial startup period.

Sec. 63.2851 What is a plan for demonstrating compliance?

(a) You must develop and implement a written plan for demonstrating compliance that provides the detailed procedures you will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying solvent loss from the source and amount of oilseed processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales, volumetric displacement, and

material mass balances. Because the industry does not have a uniform set of procedures, you must develop and implement your own site-specific plan for demonstrating compliance before the compliance date for your source. You must also incorporate the plan for demonstrating compliance by reference in the source's title V permit and keep the plan on-site and readily available as long as the source is operational. If you make any changes to the plan for demonstrating compliance, then you must keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision. The plan for demonstrating compliance must include the items in paragraphs (a)(1) through (7) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) A detailed description of all methods of measurement your source will use to determine your solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.

4) When each measurement will be made.

5) Examples of each calculation you will use to determine your compliance status. Include examples of how you will convert data measured with one parameter to other terms for use in compliance determination.

6) Example logs of how data will be recorded.

7) A plan to ensure that the data continue to meet compliance demonstration needs.

(b) The responsible agency of these NESHAP may require you to revise your plan for demonstrating compliance. The responsible agency may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.

Sec. 63.2852 What is a startup, shutdown, and malfunction plan?

You must develop a written SSM plan in accordance with Sec. 63.6(e)(3) and implement the plan, when applicable. You must complete the SSM plan before the compliance date for your source. You must also incorporate the SSM plan by reference in your source's title V permit and keep the SSM plan on-site and readily available as long as the source is operational. The SSM plan provides detailed procedures for operating and maintaining your

source to minimize emissions during a qualifying SSM event for which the source chooses the Sec. 63.2850(e)(2) malfunction period, or the Sec. 63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions. Some or all of the procedures may come from plans you developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the applicable requirements of these NESHAP.

Sec. 63.2853 How do I determine the actual solvent loss?

By the end of each calendar month following an operating month, you must determine the total solvent loss in gallons for the previous operating month. The total solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. If you have determined solvent losses for 12 or more operating months, then you must also determine the 12 operating months rolling sum of actual solvent loss in gallons by summing the monthly actual solvent loss for the previous 12 operating months. The 12 operating months rolling sum of solvent loss is the "actual solvent loss," which is used to calculate your compliance ratio as described in Sec. 63.2840.

(a) To determine the actual solvent loss from your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (7) of this section:

(1) The dates that define each operating status period during a calendar month. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If the source maintains the same operating status during an entire calendar month, these dates are the beginning and ending dates of the calendar month. If, prior to the effective date of this rule, your source determines the solvent loss on an accounting month, as defined in Sec. 63.2872, rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP.

(2) Source operating status. You must categorize the operating status of your source for each recorded time interval in accordance with criteria in Table 1 of this section, as follows:

TABLE 1 OF § 63.2853.—CATEGORIZING YOUR SOURCE OPERATING STATUS

If during a recorded time interval	then your source operating status is
(i) Your source processes any amount of listed oilseed and source is not operating under an initial startup operating period or a malfunction period subject to § 63.2850(c)(2), (d)(2), or (e)(2).	A normal operating period.
(ii) Your source processes no agricultural product and your source is not operating under an initial startup period or malfunction period subject to § 63.2850(c)(2), (d)(2), or (e)(2).	A non-operating period.
(iii) You choose to operate your source under an initial startup period subject to § 63.2850(c)(2) or (d)(2).	An initial startup period.
(iv) You choose to operate your source under a malfunction period subject to § 63.2850(e)(2).	A malfunction period.
(v) Your source processes agricultural products not defined as listed oilseed.	An exempt period.

(3) Measuring the beginning and ending solvent inventory. You are required to measure and record the solvent inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in Sec. 63.2851, to determine the extraction solvent inventory, and maintain readily available records of the actual solvent loss inventory, as described in Sec. 63.2862(c)(1). In general, you must measure and record the solvent inventory only when the source is actively processing any type of agricultural product. When the source is not active, some or all of the solvent working capacity is transferred to solvent storage tanks which can artificially inflate the solvent inventory.

(4) Gallons of extraction solvent received. Record the total gallons of extraction solvent received in each shipment. For most processes, the gallons of solvent received represents purchases of delivered solvent added to the solvent storage inventory. However, if your process refines additional vegetable oil from off-site sources, recovers solvent from the off-site oil, and adds it to the on-site solvent inventory, then you must determine the quantity of recovered solvent and include it in the gallons of extraction solvent received.

(5) Solvent inventory adjustments. In some situations, solvent losses determined directly from the measured solvent inventory and quantity of solvent received is not an accurate estimate of the "actual solvent loss" for use in determining compliance ratios. In such cases, you may adjust the total solvent loss for each normal operating period as long as you provide a reasonable justification for the adjustment. Situations that may require adjustments of the total solvent loss include, but are not limited to, situations in paragraphs (a)(5)(i) and (ii) of this section:

(i) Solvent destroyed in a control device. You may use a control device to reduce solvent emissions to meet the emission standard. The use of a control device does not alter the emission limit for the source. If you use a control device that reduces solvent emissions through destruction of the solvent instead of recovery, then determine the gallons of solvent that enter the control device and are destroyed there during each normal operating period. All solvent destroyed in a control device during a normal operating period can be subtracted from the total solvent loss. Examples of destructive emission control devices include catalytic incinerators, boilers, or flares. Identify and describe, in your plan for demonstrating compliance, each type of reasonable and sound measurement method that you use to quantify the gallons of solvent entering and exiting the control device and to determine the destruction efficiency of the control device. You may use design evaluations to document the gallons of solvent destroyed or removed by the control device instead of performance testing under Sec. 63.7. The design evaluations must be based on the procedures and options described in Sec. 63.985(b)(1)(i)(A) through (C) or Sec. 63.11, as appropriate. All data, assumptions,

and procedures used in such evaluations must be documented and available for inspection. If you use performance testing to determine solvent flow rate to the control device or destruction efficiency of the device, follow the procedures as outlined in Sec. 63.997(e)(1) and (2). Instead of periodic performance testing to demonstrate continued good operation of the control device, you may develop a monitoring plan, following the procedures outlined in Sec. 63.988(c) and using operational parametric measurement devices such as fan parameters, percent measurements of lower explosive limits, and combustion temperature.

(ii) Changes in solvent working capacity. In records you keep on-site, document any process modifications resulting in changes to the solvent working capacity in your vegetable oil production process. Solvent working capacity is defined in Sec. 63.2872. In general, solvent working capacity is the volume of solvent normally retained in solvent recovery equipment such as the extractor, desolventizer-toaster, solvent storage, working tanks, mineral oil absorber, condensers, and oil/solvent distillation system. If the change occurs during a normal operating period, you must determine the difference in working solvent volume and make a one-time documented adjustment to the solvent inventory.

(b) Use Equation 1 of this section to determine the actual solvent loss occurring from your affected source for all normal operating periods recorded within a calendar month. Equation 1 of this section follows:

$$\text{Monthly Actual Solvent (gal)} = \sum_{i=1}^{n} \left(SOLV_B - SOLV_E + SOLV_R \pm SOLV_A\right)_i \qquad \text{(Eq. 1)}$$

Where:

$SOLV_B$ = Gallons of solvent in the inventory at the beginning of normal operating period "i" as determined in paragraph (a)(3) of this section.

$SOLV_E$ = Gallons of solvent in the inventory at the end of normal operating period "i" as determined in paragraph (a)(3) of this section.

$SOLV_R$ = Gallons of solvent received between the beginning and ending inventory dates of normal operating period "i" as determined in paragraph (a)(4) of this section.

$SOLV_A$ = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period "i" as determined in paragraph (a)(5) of this section.

n = Number of normal operating periods in a calendar month.

(c) The actual solvent loss is the total solvent losses during normal operating periods for the previous 12 operating months. You determine your actual solvent loss by summing the monthly actual solvent losses for the previous 12 operating months. You must record the actual solvent loss by the end of each calendar month following an operating month. Use the actual solvent loss in Equation 2 of Sec. 63.2840 to determine the compliance ratio. Actual solvent loss does not include losses that occur during operating status periods listed in paragraphs (c)(1) through (4) of this section. If any one of these four operating status periods span an entire month, then the month is treated as nonoperating and there is no compliance ratio determination.

(1) Nonoperating periods as described in paragraph (a)(2)(ii) of this section.

(2) Initial startup periods as described in Sec. 63.2850(c)(2) or (d)(2).

(3) Malfunction periods as described in Sec. 63.2850(e)(2).

(4) Exempt operation periods as described in paragraph (a)(2)(v) of this section.

Sec. 63.2854 How do I determine the weighted average volume fraction of HAP in the actual solvent loss?

(a) This section describes the information and procedures you must use to determine the weighted average volume fraction of HAP in extraction solvent received for use in your vegetable oil production process. By the end of each calendar month following an operating month, determine the weighted average volume fraction of HAP in extraction solvent received since the end of the previous operating

month. If you have determined the monthly weighted average volume fraction of HAP in solvent received for 12 or more operating months, then also determine an overall weighted average volume fraction of HAP in solvent received for the previous 12 operating months. Use the volume fraction of HAP determined as a 12 operating months weighted average in Equation 2 of Sec. 63.2840 to determine the compliance ratio.

(b) To determine the volume fraction of HAP in the extraction solvent determined as a 12 operating months weighted average, you must comply with paragraphs (b)(1) through (3) of this section:

(1) Record the volume fraction of each HAP comprising more than 1 percent by volume of the solvent in each delivery of solvent, including solvent recovered from off-site oil. To determine the HAP content of the material in each delivery of solvent, the reference method is EPA Method 311 of appendix A of this part. You may use EPA Method 311, an approved alternative method, or any other reasonable means for determining the HAP content. Other reasonable means of determining HAP content include, but are not limited to, a material safety data sheet or a manufacturer's certificate of analysis. A certificate of analysis is a legal and binding document provided by a solvent manufacturer. The purpose of a certificate of analysis is to list the test methods and analytical results that determine chemical properties of the solvent and the volume percentage of all HAP components present in the solvent at quantities greater than 1 percent by volume. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. However, if the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(2) Determine the weighted average volume fraction of HAP in the extraction solvent each operating month. The weighted average volume fraction of HAP for an operating month includes all solvent received since the end of the last operating month, regardless of the operating status at the time of the delivery. Determine the monthly weighted average volume fraction of HAP by summing the products of the HAP volume fraction of each delivery and the volume of each delivery and dividing the sum by the total volume of all deliveries as expressed in Equation 1 of this section. Record the result by the end of

each calendar month following an operating month. Equation 1 of this section follows:

$$\text{Monthly Weighted Average HAP Content of Extraction Solvent (volume fraction)} = \frac{\sum_{i=1}^{n} (\text{Received}_i * \text{Content}_i)}{\text{Total Received}} \quad \text{(Eq. 1)}$$

Where:

Received_i = Gallons of extraction solvent received in delivery "i."

Content_i = The volume fraction of HAP in extraction solvent delivery "i."

Total Received = Total gallons of extraction solvent received since the end of the previous operating month.

n = Number of extraction solvent deliveries since the end of the previous operating month.

(3) Determine the volume fraction of HAP in your extraction solvent as a 12 operating months weighted average. When your source has processed oilseed for 12 operating months, sum the products of the monthly weighted average HAP volume fraction and corresponding volume of solvent received, and divide the sum by the total volume of solvent received for the 12 operating months, as expressed by Equation 2 of this section. Record the result by the end of each calendar month following an operating month and use it in Equation 2 of Sec. 63.2840 to determine the compliance ratio. Equation 2 of this section follows:

$$\text{12 - Month Weighted Average of HAP Content in Solvent Received (volume fraction)} = \frac{\sum_{i=1}^{12} (\text{Received}_i * \text{Content}_i)}{\text{Total Received}} \quad \text{(Eq. 2)}$$

Where:

Received_i = Gallons of extraction solvent received in operating month "i" as determined in accordance with Sec. 63.2853(a)(4).

$Content_i$ = Average volume fraction of HAP in extraction solvent received in operating month "i" as determined in accordance with paragraph (b)(1) of this section.

Total Received = Total gallons of extraction solvent received during the previous 12 operating months.

Sec. 63.2855 How do I determine the quantity of oilseed processed?

All oilseed measurements must be determined on an as received basis, as defined in Sec. 63.2872. The as received basis refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing. By the end of each calendar month following an operating month, you must determine the tons as received of each listed oilseed processed for the operating month. The total oilseed processed for an operating month includes the total of each oilseed processed during all normal operating periods that occur within the operating month. If you have determined the tons of oilseed processed for 12 or more operating months, then you must also determine the 12 operating months rolling sum of each type oilseed processed by summing the tons of each type of oilseed processed for the previous 12 operating months. The 12 operating months rolling sum of each type of oilseed processed is used to calculate the compliance ratio as described in Sec. 63.2840.

(a) To determine the tons as received of each type of oilseed processed at your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (5) of this section:

(1) The dates that define each operating status period. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If, prior to the effective date of this rule, your source determines the oilseed inventory on an accounting month rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP. The dates on each oilseed inventory log must be consistent with the dates recorded for the solvent inventory.

(2) Source operating status. You must categorize the source operation for each recorded time interval. The source operating status for each time interval recorded on the oilseed inventory for each type of oilseed must be consistent with the operating status recorded on the solvent inventory logs as described in Sec. 63.2853(a)(2).

(3) Measuring the beginning and ending inventory for each oilseed. You are required to measure and record the oilseed inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in Sec. 63.2851, to determine the oilseed inventory on an as received basis and maintain readily available records of the oilseed inventory as described by Sec. 63.2862(c)(3).

(4) Tons of each oilseed received. Record the type of oilseed and tons of each shipment of oilseed received and added to your on-site storage.

(5) Oilseed inventory adjustments. In some situations, determining the quantity of oilseed processed directly from the measured oilseed inventory and quantity of oilseed received is not an accurate estimate of the tons of oilseed processed for use in determining compliance ratios. For example, spoiled and molded oilseed removed from storage but not processed by your source will result in an overestimate of the quantity of oilseed processed. In such cases, you must adjust the oilseed inventory and provide a justification for the adjustment. Situations that may require oilseed inventory adjustments include, but are not limited to, the situations listed in paragraphs (a)(5)(i) through (v) of this section:

(i) Oilseed that mold or otherwise become unsuitable for processing.

(ii) Oilseed you sell before it enters the processing operation.

(iii) Oilseed destroyed by an event such as a process malfunction, fire, or natural disaster.

(iv) Oilseed processed through operations prior to solvent extraction such as screening,

dehulling, cracking, drying, and conditioning; but that are not routed to the solvent extractor for further processing.

(v) Periodic physical measurements of inventory. For example, some sources periodically empty oilseed storage silos to physically measure the current oilseed inventory. This periodic measurement procedure typically results in a small inventory correction. The correction factor, usually less than 1 percent, may be used to make an adjustment to the source's oilseed inventory that was estimated previously with indirect measurement techniques. To make this adjustment, your plan for demonstrating compliance must provide for such an adjustment.

(b) Use Equation 1 of this section to determine the quantity of each oilseed type processed at your affected source during normal operating periods recorded within a calendar month. Equation 1 of this section follows:

$$\text{Monthly Quantity of Each Oilseed Processed (tons)} = \sum_{n=1}^{n} \left(SEED_B - SEED_E + SEED_R \pm SEED_A\right) \quad \text{(Eq. 1)}$$

Where:

$SEED_B$ = Tons of oilseed in the inventory at the beginning of normal operating period "i" as determined in accordance with paragraph (a)(3) of this section.

$SEED_E$ = Tons of oilseed in the inventory at the end of normal operating period "i" as determined in accordance with paragraph (a)(3) of this section.

$SEED_R$ = Tons of oilseed received during normal operating period "i" as determined in accordance with paragraph (a)(4) of this section.

$SEED_A$ = Tons of oilseed added or removed from the oilseed inventory during normal operating period "i" as determined in accordance with paragraph (a)(5) of this section.

n = Number of normal operating periods in the calendar month during which this type oilseed was processed.

(c) The quantity of each oilseed processed is the total tons of each type of listed oilseed processed during normal operating periods in the previous 12 operating months. You determine the tons of each oilseed processed by summing the monthly quantity of each oilseed processed for the previous 12 operating months. You must record the 12 operating months quantity of each type of oilseed processed by the end of each calendar month following an operating month. Use the 12 operating months quantity of each type of oilseed processed to determine the compliance ratio as described in Sec. 63.2840. The quantity of oilseed processed does not include oilseed processed during the operating status periods in paragraphs (c)(1) through (4) of this section:

(1) Nonoperating periods as described in Sec. 63.2853 (a)(2)(ii).

(2) Initial startup periods as described in Sec. 63.2850(c)(2) or (d)(2).

(3) Malfunction periods as described in Sec. 63.2850(e)(2).

(4) Exempt operation periods as described in Sec. 63.2853 (a)(2)(v).

(5) If any one of these four operating status periods span an entire calendar month, then the calendar month is treated as a nonoperating month and there is no compliance ratio determination.

Notifications, Reports, and Records

Sec. 63.2860 What notifications must I submit and when?

You must submit the one-time notifications listed in paragraphs (a) through (d) of this section to the responsible agency:

(a) Initial notification for existing sources. For an existing source, submit an initial notification to the agency responsible for these NESHAP no later than 120 days after the effective date of this subpart. In the notification, include the items in paragraphs (a)(1) through (5) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Identification of the relevant standard, such as the vegetable oil production NESHAP, and compliance date.

(4) A brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.

(5) A statement designating the source as a major source of HAP or a demonstration that the source meets the definition of an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.

(b) Initial notifications for new and reconstructed sources. New or reconstructed sources must submit a series of notifications before, during, and after source construction per the schedule listed in Sec. 63.9. The information requirements for the notifications are the same as those listed in the General Provisions with the exceptions listed in paragraphs (b)(1) and (2) of this section:

(1) The application for approval of construction does not require the specific HAP emission data required in Sec. 63.5(d)(1)(ii)(H) and (iii), (d)(2) and (d)(3)(ii). The application for approval of construction would include, instead, a brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.

(2) The notification of actual startup date must also include whether you have elected to operate under an initial startup period subject to Sec. 63.2850(c)(2) and provide an estimate and justification for the anticipated duration of the initial startup period.

(c) Significant modification notifications. Any existing or new source that plans to undergo a significant modification as defined in Sec. 63.2872 must submit two reports as described in paragraphs (c)(1) and (2) of this section:

(1) Initial notification. You must submit an initial notification to the agency responsible for these NESHAP 30 days prior to initial startup of the significantly modified source. The initial notification must demonstrate that the proposed changes qualify as a significant modification. The initial notification must include the items in paragraphs (c)(1)(i) and (ii) of this section:

(i) The expected startup date of the modified source.

(ii) A description of the significant modification including a list of the equipment that will be replaced or modified. If the significant modification involves changes other than adding or replacing extractors, desolventizer-toasters (conventional and specialty), and meal dryer-coolers, then you must also include the fixed capital cost of the new components, expressed as a percentage of the fixed capital cost to build a comparable new vegetable oil production process; supporting documentation for the cost estimate; and documentation that the proposed changes will significantly affect solvent losses.

(2) Notification of actual startup. You must submit a notification of actual startup date within 15 days after initial startup of the modified source. The notification must include the items in paragraphs (c)(2)(i) through (iv) of this section:

(i) The initial startup date of the modified source.

(ii) An indication whether you have elected to operate under an initial startup period subject to Sec. 63.2850(d)(2).

(iii) The anticipated duration of any initial startup period.

(iv) A justification for the anticipated duration of any initial startup period.

(d) Notification of compliance status. As an existing, new, or reconstructed source, you must submit a notification of compliance status report to the responsible agency no later than 60 days after determining your initial 12 operating months compliance ratio. If you are an existing source, you generally must submit this notification no later than 50 calendar months after the effective date of these NESHAP (36 calendar months for compliance, 12 operating months to record data, and 2 calendar months to complete the report). If you are a new or reconstructed source, the notification of compliance status is generally due no later than 20 calendar months after initial startup (6 calendar months for the initial startup period, 12 operating months to record data, and 2 calendar months to complete the report). The notification of compliance status must contain the items in paragraphs (d)(1) through (6) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Each listed oilseed type processed during the previous 12 operating months.

(4) Each HAP identified under Sec. 63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 operating months period used for the initial compliance determination.

(5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.

(6) A compliance certification indicating whether the source complied with all of the requirements of this subpart throughout the 12 operating months used for the initial source compliance determination. This certification must include a certification of the items in paragraphs (d)(6)(i) through (iii) of this section:

(i) The plan for demonstrating compliance (as described in Sec. 63.2851) and SSM plan (as described in Sec. 63.2852) are complete and available on-site for inspection.

(ii) You are following the procedures described in the plan for demonstrating compliance.

(iii) The compliance ratio is less than or equal to 1.00.

Sec. 63.2861 What reports must I submit and when?

After the initial notifications, you must submit the reports in paragraphs (a) through (d) of this section to the agency responsible for these NESHAP at the appropriate time intervals:

(a) Annual compliance certifications. The first annual compliance certification is due 12 calendar months after you submit the notification of compliance status. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. Include the

information in paragraphs (a)(1) through (6) of this section in the annual certification:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Each listed oilseed type processed during the 12 calendar months period covered by the report.

(4) Each HAP identified under Sec. 63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.

(5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.

(6) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, you must include a certification of the items in paragraphs (a)(6)(i) through (ii) of this section:

(i) You are following the procedures described in the plan for demonstrating compliance.

(ii) The compliance ratio is less than or equal to 1.00.

(b) Deviation notification report. Submit a deviation report for each compliance determination you make in which the compliance ratio exceeds 1.00 as determined under Sec. 63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs (b)(1) through (4) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.

(4) The compliance ratio comprising the deviation. You may reduce the frequency of submittal of the deviation notification report if the agency responsible for these NESHAP does not object as provided in Sec. 63.10(e)(3)(iii).

(c) Periodic startup, shutdown, and malfunction report. If you choose to operate your source under an initial startup period subject to Sec. 63.2850(c)(2) or (d)(2) or a malfunction period subject to Sec. 63.2850(e)(2), you must submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the items in paragraphs (c)(1) through (3) of this section:

(1) The name, title, and signature of a source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan.

(2) A description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period.

(3) An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.

(d) Immediate SSM reports. If you handle a SSM during an initial startup period subject to Sec. 63.2850(c)(2) or (d)(2) or a malfunction period subject to Sec. 63.2850(e)(2) differently from procedures in the SSM plan, then you must submit an immediate SSM report. Immediate SSM reports consist of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in paragraphs (d)(1) through (3) of this section:

(1) The name, title, and signature of a source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan.

(2) A description and date of the SSM event, its duration, and reason it qualifies as a SSM.

(3) An estimate of the solvent loss for the duration of the SSM event with supporting documentation.

Sec. 63.2862 What records must I keep?

(a) You must satisfy the recordkeeping requirements of this section by the compliance date for your source specified in Table 1 of Sec. 63.2834.

(b) Prepare a plan for demonstrating compliance (as described in Sec. 63.2851) and a SSM plan (as described in Sec. 63.2852). In these two plans, describe the procedures you will follow in obtaining and recording data, and determining compliance under normal operations or a SSM subject to the Sec. 63.2850(c)(2) or (d)(2) initial startup period or the Sec. 63.2850(e)(2) malfunction period. Complete both plans before the compliance date for your source and keep them on-site and readily available as long as the source is operational.

(c) If your source processes any listed oilseed, record the items in paragraphs (c)(1) through (5) of this section:

(1) For the solvent inventory, record the information in paragraphs (c)(1)(i) through (vii) of this section in accordance with your plan for demonstrating compliance:

(i) Dates that define each operating status period during a calendar month.

(ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval.

(iii) Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.

(iv) The gallons of all extraction solvent received, purchased, and recovered during each calendar month.

(v) All extraction solvent inventory adjustments, additions or subtractions. You must document the reason for the adjustment and justify the quantity of the adjustment.

(vi) The total solvent loss for each calendar month, regardless of the source operating status.

(vii) The actual solvent loss in gallons for each operating month.

(2) For the weighted average volume fraction of HAP in the extraction solvent, you must record the items in paragraphs (c)(2)(i) through (iii) of this section:

(i) The gallons of extraction solvent received in each delivery.

(ii) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.

(iii) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with Sec. 63.2854(b)(2).

(3) For each type of listed oilseed processed, record the items in paragraphs (c)(3)(i) through (vi) of this section, in accordance with your plan for demonstrating compliance:

(i) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.

(ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, you must record which type of listed oilseed is being processed in addition to the source operating status.

(iii) The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period.

(iv) The tons of each type of listed oilseed received at the affected source each normal operating period.

(v) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. You must document the reason for the adjustment and justify the quantity of the adjustment.

(vi) The tons of each type of listed oilseed processed during each operating month.

(d) After your source has processed listed oilseed for 12 operating months, and you are not operating during an initial startup period as described in Sec. 63.2850(c)(2) or (d)(2), or a malfunction period as described in Sec. 63.2850(e)(2), record the items in paragraphs (d)(1) through (5) of this section by the end of the calendar month following each operating month:

(1) The 12 operating months rolling sum of the actual solvent loss in gallons as described in Sec. 63.2853(c).

(2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in Sec. 63.2854(b)(3).

(3) The 12 operating months rolling sum of each type of listed oilseed processed at the affected source in tons as described in Sec. 63.2855(c).

(4) A determination of the compliance ratio. Using the values from Secs. 63.2853, 63.2854, 63.2855, and Table 1 of Sec. 63.2840, calculate the compliance ratio using Equation 2 of Sec. 63.2840.

(5) A statement of whether the source is in compliance with all of the requirements of this subpart. This includes a determination of whether you have met all of the applicable requirements in Sec. 63.2850.

(e) For each SSM event subject to an initial startup period as described in Sec. 63.2850(c)(2) or (d)(2), or a malfunction period as described in Sec. 63.2850(e)(2), record the items in paragraphs (e)(1) through (3) of this section by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:

(1) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.

(2) An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.

(3) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.

Sec. 63.2863 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for review in accordance with Sec. 63.10(b)(1).

(b) As specified in Sec. 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, in accordance with Sec. 3.10(b)(1). You can keep the records off-site for the remaining 3 years.

Other Requirements and Information

Sec. 63.2870 What parts of the General Provisions apply to me?

Table 1 of this section shows which parts of the General Provisions in Secs. 63.1 through 63.15 apply to you. Table 1 of Sec. 63.2870 follows:

TABLE 1 OF § 63.2870 – APPLICABILITY OF 40 CFR P ART 63, SUBPART A, TO 40 CFR, PART 63, SUBPART GGGG

General Provisions Citation	Subject of Citation	Brief Description of Requirement	Applies to Subpart	Explanation
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications.	Yes	
§63.2	Definitions	Definitions for part 63 standards	Yes	Except as specifically provided in this subpart.
§63.3	Units and abbreviations	Units and abbreviations for part 63 standards.	Yes	
§63.4	Prohibited activities and circumvention.	Prohibited activities; compliance date; circumvention; severability	Yes	
§63.5	Construction/ reconstruction	Applicability; applications; approvals.	Yes	Except for subsections of §63.5 as listed below.

General Provisions Citation	Subject of Citation	Brief Description of Requirement	Applies to Subpart	Explanation
§63.5(c)	[Reserved]			
§63.5(d)(1)(ii)(H)	Application for approval	Type and quantity of HAP, operating parameters.	No	All sources emit HAP. Subpart GGGG does not require control from specific emission points
§63.5(d)(1)(ii)(I)	[Reserved]			
§63.5(d)(1)(iii), (d)(2), (d)(3)(ii)		Application for approval	No	The requirements of the application for approval for new, reconstructed and significantly modified sources are described in § 63.2860(b) and (c) of subpart GGGG. General provision requirements for identification of HAP emission points or estimates of actual emissions are not required. Descriptions of control and methods, and the estimated and actual control efficiency of such do not apply. Requirements for describing control equipment and the estimated and actual control efficiency of such equipment apply only to control equipment to which the subpart GGGG requirements for quantifying.
§63.6	Applicability of General Provisions	Applicability	Yes	Except for subsections of §63.6 as listed below.

General Provisions Citation	Subject of Citation	Brief Description of Requirement	Applies to Subpart	Explanation
§63.6(b)(1)-(3)	Compliance dates, new and reconstructed sources		No	Section 63.2834 of subpart GGGG specifies the compliance dates for new and reconstructed sources
§63.6(b)(6)	[Reserved]			
§63.6(c)(3)-(4)	[Reserved]			
§63.6(d)	[Reserved]			
§63.6(e)	Operation and maintenance requirements.		Yes	Implement your SSM plan, as specified in §63.2851.
§63.6(f)-(g)	Compliance with nonopacity emission standards except during SSM.	Comply with emission standards at all times except during SSM.	No	Subpart GGGG does not have nonopacity requirements.
§ 63.6(h)	Opacity/ Visible emission (VE) standards.		No	Subpart GGGG has no opacity or VE standards.
§63.6(i)	Compliance extension	Procedures and criteria for responsible agency to grant compliance extension.	Yes	
§63.6(j)	Presidential compliance exemption	President may exempt source category from requirement to comply with subpart.	Yes	

General Provisions Citation	Subject of Citation	Brief Description of Requirement	Applies to Subpart	Explanation
§63.7	Performance testing requirements	Schedule, conditions, notifications and procedures.	Yes	Subpart GGGG requires performance testing only if the source applies additional control that destroys solvent. Section 63.2850(a)(6) requires sources to follow the performance testing guidelines of the General Provisions if a control is added.
§63.8	Monitoring requirements		No	Subpart GGGG does not require monitoring other than as specified therein.
§63.9	Notification requirements	Applicability and state delegation	Yes	Except for subsections of § 63.9 as listed below.
§63.9(b)2)	Notification requirements	Initial notification requirements for existing sources.	No	Section 63.2860(a) of subpart GGGG specifies the requirements of the initial notification for existing sources.
§63.9(b)(3)-(5)	Notification requirements	Notification requirement for certain new/ reconstructed sources.	Yes	Except the information requirements differ as described in §63.2860(b) of subpart GGGG.
§63.9(e)	Notification of performance test	Notify responsible agency 60 days ahead.	Yes	Applies only if performance testing is performed.
§63.9(f)	Notification of VE/opacity observations.	Notify responsible agency 30 days ahead.	No	Subpart GGGG has no opacity or VE standards.

General Provisions Citation	Subject of Citation	Brief Description of Requirement	Applies to Subpart	Explanation
§63.9(g)	Additional notifications when using a continuous monitoring system (CMS).	Notification of performance evaluation; Notification using COMS data; notification that exceeded criterion for relative accuracy.	No	Subpart GGGG has no CMS requirements.
§63.9(h)	Notification of compliance status	Contents	No	Section 63.2860(d) of subpart GGGG specifies requirements for the notification of compliance status.
§63.10	Recordkeeping/ reporting	Schedule for reporting, record storage	Yes	Except for subsections of § 63.10 as listed below.
§63.10(b)(2)(i)	Recordkeeping	Record SSM event	Yes	Applicable to periods when sources must implement their SSM plan as specified in subpart GGGG.
§63.10(b)(2)(ii)-(iii)	Recordkeeping	Malfunction of air pollution equipment	No	Applies only if air pollution control equipment has been added to the process and is necessary for the source to meet the emission limit.
§63.10(b)(2)(vi)	Recordkeeping	CMS recordkeeping	No	Subpart GGGG has no CMS requirements.
§63.10(b)(2)(viii)-(ix)	Recordkeeping	Conditions of performance test	Yes	Applies only if performance tests are performed Subpart GGGG does not have any CMS opacity or VE observation requirements.

General Provisions Citation	Subject of Citation	Brief Description of Requirement	Applies to Subpart	Explanation
§63.10(b)(2)(x)-(xii)	Recordkeeping	CMS, performance testing, and opacity and VE observations record-keeping.	No	Subpart GGGG does not require CMS.
§63.10(c)	Recordkeeping	Additional CMS recordkeeping	No	Subpart GGGG does not require CMS.
§63.10(d)(2)	Reporting	Reporting performance test results	Yes	Applies only if performance testing is performed.
§63.10(d)(3)	Reporting	Reporting opacity or VE observations	No	Subpart GGGG has no opacity or VE standards.
§63.10(d)(4)	Reporting	Progress reports	Yes	Applies only if a condition of compliance extension exists.

Sec. 63.2871 Who implements and enforces this subpart?

(a) This subpart can be implemented by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, as well as the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are as follows:

(1) Approval of alternative nonopacity emissions standards under Sec. 63.6(g).

(2) Approval of alternative opacity standards under Sec. 63.6(h)(9).

(3) Approval of major alternatives to test methods under Sec. 63.7(e)(2)(ii) and (f) and as defined in Sec. 63.90.

(4) Approval of major alternatives to monitoring under Sec. 63.8(f) and as defined in Sec. 63.90.

(5) Approval of major alternatives to recordkeeping and reporting under Sec. 63.10(f) and as defined in Sec. 63.90.

Sec. 63.2872 What definitions apply to this subpart?

Terms used in this subpart are defined in the sources listed:

(a) The Clean Air Act, section 112(a).

(b) In 40 CFR 63.2, the NESHAP General Provisions.

(c) In this section as follows:

Accounting month means a time interval defined by a business firm during which corporate economic and financial factors are determined on a consistent and regular basis. An accounting month will consist of approximately 4 to 5 calendar weeks and each accounting month will be of approximate equal duration. An accounting month may not correspond exactly to a calendar month, but 12 accounting months will correspond exactly to a calendar year.

Actual solvent loss means the gallons of solvent lost from a source during 12 operating months as determined in accordance with Sec. 63.2853.

Agricultural product means any commercially grown plant or plant product.

Allowable HAP loss means the gallons of HAP that would have been lost from a source if the source was operating at the solvent loss factor for each listed oilseed type. The allowable HAP loss in gallons is determined by multiplying the tons of each oilseed type processed during the previous 12 operating months, as determined in accordance with Sec. 63.2855, by the corresponding oilseed solvent loss factor (gal/ton) listed in Table 1 of Sec. 63.2840, and by the dimensionless constant 0.64, and summing the result for all oilseed types processed.

Area source means any source that does not meet the major source definition.

As received is the basis upon which all oilseed measurements must be determined and refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing.

Batch operation means any process that operates in a manner where the addition of raw material and withdrawal of product do not occur simultaneously. Typically, raw material is added to a process, operational steps occur, and a product is removed from the process. More raw material is then added to the process and the cycle repeats.

Calendar month means 1 month as specified in a calendar.

Compliance date means the date on which monthly compliance recordkeeping begins. For existing sources, recordkeeping typically begins 3 years after the effective date of the subpart. For new and reconstructed sources, recordkeeping typically begins upon initial startup, except as noted in Sec. 63.2834.

Compliance ratio means a ratio of the actual HAP loss in gallons from the previous 12 operating months to an allowable HAP loss in gallons, which is determined by using oilseed solvent loss factors in Table 1 of Sec. 63.2840, the weighted average volume fraction of HAP in solvent received for the previous 12 operating months, and the tons of each type of listed oilseed processed in the previous 12 operating months. Months during which no listed oilseed is processed, or months during which the Sec. 63.2850(c)(2) or (d)(2) initial startup period or the Sec. 63.2850(e)(2) malfunction period applies, are excluded from this calculation. Equation 2 of Sec. 63.2840 is used to calculate this value. If the value is less than or equal to 1.00, the source is in compliance. If the value is greater than 1.00, the source is deviating from compliance.

Continuous operation means any process that adds raw material and withdraws product simultaneously. Mass, temperature, concentration and other properties typically approach steady-state conditions.

Conventional desolventizer means a desolventizer toaster that operates with indirect and direct-contact steam to remove solvent from the extracted meal. Oilseeds processed in a conventional desolventizer produce crude vegetable oil and crude meal products, such as animal feed.

Corn germ dry milling means a source that processes corn germ that has been separated from the other corn components using a "dry" process of mechanical chafing and air sifting.

Corn germ wet milling means a source that processes corn germ that has been separated from other corn components

using a "wet" process of centrifuging a slurry steeped in a dilute sulfurous acid solution.

Exempt period means a period of time during which a source processes agricultural products not defined as listed oilseed.

Extraction solvent means an organic chemical medium used to remove oil from an oilseed. Typically, the extraction solvent is a commercial grade of hexane isomers which have an approximate HAP content of 64 percent by volume.

Hazardous air pollutant (HAP) means any substance or mixture of substances listed as a hazardous air pollutant under section 112(b) of the Clean Air Act, as of April 12, 2001.

Initial startup date means the first calendar day that a new, reconstructed or significantly modified source processes any listed oilseed.

Initial startup period means a period of time from the initial startup date of a new, reconstructed or significantly modified source, for which you choose to operate the source under an initial startup period subject to Sec. 63.2850(c)(2) or (d)(2). During an initial startup period, a source is in compliance with the standards by following the operating and maintenance procedures listed for minimizing HAP emissions in the source's SSM plan rather than being subject to a HAP emission limit. The initial startup period following initial startup of a new or reconstructed source may not exceed 6 calendar months. The initial startup period following a significant modification may not exceed 3 calendar months. Solvent and oilseed inventory information recorded during the initial startup period is excluded from use in any compliance ratio determinations.

Large cottonseed plant means a vegetable oil production process that processes 120,000 tons or more of cottonseed and other listed oilseed during all normal operating periods in a 12 operating months period used to determine compliance.

Malfunction period means a period of time between the beginning and end of a process malfunction and the time reasonably necessary for a source to correct the malfunction for which you choose to operate the source under a malfunction period subject to Sec. 63.2850(e)(2). This period may include the duration of an unscheduled process shutdown, continued operation during a malfunction, or the subsequent process startup after a shutdown resulting from a malfunction. During a malfunction period, a source complies with the standards

by following the operating and maintenance procedures described for minimizing HAP emissions in the source's SSM plan rather than being subject to a HAP emission limit. Therefore, solvent and oilseed inventory information recorded during a malfunction period is excluded from use in any compliance ratio determinations.

Mechanical extraction means removing vegetable oil from oilseeds using only mechanical devices such as presses or screws that physically force the oil from the oilseed. Mechanical extraction techniques use no organic solvents to remove oil from an oilseed.

Nonoperating period means any period of time in which a source processes no agricultural product. This operating status does not apply during any period in which the source operates under an initial startup period as described in Sec. 63.2850(c)(2) or (d)(2), or a malfunction period, as described in Sec. 63.2850(e)(2).

Normal operating period means any period of time in which a source processes a listed oilseed that is not categorized as an initial startup period as described in Sec. 63.2850(c)(2) or (d)(2), or a malfunction period, as described in Sec. 63.2850(e)(2). At the beginning and ending dates of a normal operating period, solvent and oilseed inventory information is recorded and included in the compliance ratio determination.

Oilseed or listed oilseed means the following agricultural products: corn germ, cottonseed, flax, peanut, rapeseed (for example, canola), safflower, soybean, and sunflower.

Oilseed solvent loss factor means a ratio expressed as gallons of solvent loss per ton of oilseed processed. The solvent loss factors are presented in Table 1 of Sec. 63.2840 and are used to determine the allowable HAP loss.

Operating month means any calendar or accounting month in which a source processes any quantity of listed oilseed, excluding any entire calendar or accounting month in which the source operated under an initial startup period as described in Sec. 63.2850(c)(2) or (d)(2), or a malfunction period as described in Sec. 63.2850(e)(2). An operating month may include time intervals characterized by several types of operating status. However, an operating month must have at least one normal operating period.

Significant modification means the addition of new equipment or the modification of existing equipment that:

(1) Significantly affects solvent losses from your vegetable oil production process;

(2) The fixed capital cost of the new components represents a significant percentage of the fixed capital cost of building a comparable new vegetable oil production process;

(3) The fixed capital cost of the new equipment does not constitute reconstruction as defined in Sec. 63.2; and

(4) Examples of significant modifications include replacement of or major changes to solvent recovery equipment such as extractors, desolventizer-toasters/dryer-coolers, flash desolventizers, and distillation equipment associated with the mineral oil system, and equipment affecting desolventizing efficiency and steady-state operation of your vegetable oil production process such as flaking mills, oilseed heating and conditioning equipment, and cracking mills.

Small cottonseed plant means a vegetable oil production process that processes less than 120,000 tons of cottonseed and other listed oilseed during all normal operating periods in a 12 operating months period used to determine compliance.

Solvent extraction means removing vegetable oil from listed oilseed using an organic solvent in a direct-contact system.

Solvent working capacity means the volume of extraction solvent normally retained in solvent recovery equipment. Examples include components such as the solvent extractor, desolventizer-toaster, solvent storage and working tanks, mineral oil absorption system, condensers, and oil/solvent distillation system.

Specialty desolventizer means a desolventizer that removes excess solvent from soybean meal using vacuum conditions, energy from superheated solvent vapors, or reduced operating conditions (e.g., temperature) as compared to the typical operation of a conventional desolventizer. Soybeans processed in a specialty desolventizer result in high-protein vegetable meal products for human and animal consumption, such as calf milk replacement products and meat extender products.

Vegetable oil production process means the equipment comprising a continuous process for producing crude vegetable oil and meal products, including specialty soybean products, in which oil is removed from listed

oilseeds through direct contact with an organic solvent. Process equipment typically includes the following components: oilseed preparation operations (including conditioning, drying, dehulling, and cracking), solvent extractors, desolventizer-toasters, meal dryers, meal coolers, meal conveyor systems, oil distillation units, solvent evaporators and condensers, solvent recovery system (also referred to as a mineral oil absorption system), vessels storing solvent-laden materials, and crude meal packaging and storage vessels. A vegetable oil production process does not include vegetable oil refining operations (including operations such as bleaching, hydrogenation, and deodorizing) and operations that engage in additional chemical treatment of crude soybean meals produced in specialty desolventizer units (including operations such as soybean isolate production).

10.2 Attachment 2 - Applicable New Source Performance Standards (NSPS)

TITLE 40--PROTECTION OF ENVIRONMENT

CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY

PART 60--STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES--Subpart A--General Provisions

Sec. 60.1 Applicability.

(a) Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

(b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

(c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.

(d) Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.

(1) This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site").

(2) Except for compliance with 40 CFR 60.49b(u), the site shall have the option of either complying directly with the requirements of this part, or reducing the site-wide emissions caps in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the site-wide emissions caps in accordance with the procedures set forth in such permit, the

requirements of such permit shall apply in lieu of the otherwise applicable requirements of this part.

(3) Notwithstanding the provisions of paragraph (d)(2) of this section, for any provisions of this part except for **Subpart** Kb, the owner/operator of the site shall comply with the applicable provisions of this part if the Administrator determines that compliance with the provisions of this part is necessary for achieving the objectives of the regulation and the Administrator notifies the site in accordance with the provisions of the permit issued pursuant to 40 CFR 52.2454.

[40 FR 53346, Nov. 17, 1975, as amended at 55 FR 51382, Dec. 13, 1990; 59 FR 12427, Mar. 16, 1994; 62 FR 52641, Oct. 8, 1997]

Sec. 60.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 et seq.)

Administrator means the Administrator of the Environmental Protection Agency or his authorized representative.

Affected facility means, with reference to a stationary source, any apparatus to which a standard is applicable.

Alternative method means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for his determination of compliance.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to Title V of the Act (42 U.S.C. 7661).

Capital expenditure means an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable "annual asset guideline repair allowance percentage" specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any "excluded additions" as defined in IRS Publication 534, as would be done for tax purposes.

Clean coal technology demonstration project means a project using funds appropriated under the heading "Department of Energy-Clean

Coal Technology", up to a total amount of $2,500,000,000 for commercial demonstrations of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency.

Commenced means, with respect to the definition of new source in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

Construction means fabrication, erection, or installation of an affected facility.

Continuous monitoring system means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.

Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Equivalent method means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

Excess Emissions and Monitoring Systems Performance Report is a report that must be submitted periodically by a source in order to provide data on its compliance with stated emission limits and operating parameters, and on the performance of its monitoring systems.

Existing facility means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type.

Isokinetic sampling means sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.

Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a Title V permit occurs immediately after the EPA takes final action on the final permit.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

Monitoring device means the total equipment, required under the monitoring of operations sections in applicable subparts, used to measure and record (if applicable) process parameters.

Nitrogen oxides means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in this part.

One-hour period means any 60-minute period commencing on the hour.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Owner or operator means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.

Part 70 permit means any permit issued, renewed, or revised pursuant to part 70 of this chapter.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the reference methods specified under each applicable **subpart**, or an equivalent or alternative method.

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permitting authority means:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Proportional sampling means sampling at a rate that produces a constant ratio of sampling rate to stack gas flow rate.

Reactivation of a very clean coal-fired electric utility steam generating unit means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(2) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(3) Is equipped with low-NO_x burners prior to the time of commencement of operations following reactivation; and

(4) Is otherwise in compliance with the requirements of the Clean Air Act.

Reference method means any method of sampling and analyzing for an air pollutant as specified in the applicable **subpart**.

Repowering means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magneto hydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990. Repowering shall also include any oil and/or gas-fired unit which has been awarded

clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

Run means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

Shutdown means the cessation of operation of an affected facility for any purpose.

Six-minute period means any one of the 10 equal parts of a one-hour period.

Standard means a standard of performance proposed or promulgated under this part.

Standard conditions means a temperature of 293 K (68F) and a pressure of 101.3 kilopascals (29.92 in Hg).

Startup means the setting in operation of an affected facility for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part; and/or (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Volatile Organic Compound means any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method, an equivalent method, an alternative method, or which is determined by procedures specified under any **subpart**.

[44 FR 55173, Sept. 25, 1979, as amended at 45 FR 5617, Jan. 23, 1980; 45 FR 85415, Dec. 24, 1980; 54 FR 6662, Feb. 14, 1989; 55 FR 51382, Dec. 13, 1990; 57 FR 32338, July 21, 1992; 59 FR 12427, Mar. 16, 1994]

Sec. 60.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

A--ampere
g--gram
Hz--hertz
J--joule
K--degree Kelvin
kg--kilogram
m--meter
m^3--cubic meter
mg--milligram--10^{-3} gram
mm--millimeter--10^{-3} meter
Mg--megagram--10^6 gram
mol--mole
N--newton
ng--nanogram--10^{-9} gram
nm--nanometer--10^{-9} meter
Pa--pascal
s--second
V--volt
W--watt
Ω--ohm
μg--microgram--10^{-6} gram

(b) Other units of measure:

Btu--British thermal unit
°C--degree Celsius (centigrade)
cal--calorie
cfm--cubic feet per minute
cu ft--cubic feet
dcf--dry cubic feet
dcm--dry cubic meter
dscf--dry cubic feet at standard conditions
dscm--dry cubic meter at standard conditions
eq--equivalent
°F--degree Fahrenheit
ft--feet
gal--gallon
gr--grain
g-eq--gram equivalent
hr--hour
in--inch
k--1,000
l--liter
lpm--liter per minute
lb--pound
meq--milliequivalent
min--minute
ml--milliliter
mol. wt.--molecular weight
ppb--parts per billion
ppm--parts per million
psia--pounds per square inch absolute

psig--pounds per square inch gage
°R--degree Rankin
scf--cubic feet at standard conditions
scfh--cubic feet per hour at standard conditions
scm--cubic meter at standard conditions
sec--second
sq ft--square feet
std--at standard conditions

(c) Chemical nomenclature:

CdS--cadmium sulfide
CO--carbon monoxide
CO_2--carbon dioxide
HCl--hydrochloric acid
Hg--mercury
H_2O--water
H_2S--hydrogen sulfide
H_2SO_4--sulfuric acid
N_2--nitrogen
NO--nitric oxide
NO_2--nitrogen dioxide
NO_x--nitrogen oxides
O_2--oxygen
SO_2--sulfur dioxide
SO_3--sulfur trioxide
SO_x--sulfur oxides

(d) Miscellaneous:

A.S.T.M.--American Society for Testing and Materials

[42 FR 37000, July 19, 1977; 42 FR 38178, July 27, 1977]

Sec. 60.4 Address.

Refer to the regulations.

Sec. 60.5 Determination of construction or modification.

(a) When requested to do so by an owner or operator, the Administrator will make a determination of whether action taken or intended to be taken by such owner or operator constitutes construction (including reconstruction) or modification or the commencement thereof within the meaning of this part.

(b) The Administrator will respond to any request for a determination under paragraph (a) of this section within 30 days of receipt of such request.

[40 FR 58418, Dec. 16, 1975]

Sec. 60.6 Review of plans.

(a) When requested to do so by an owner or operator, the Administrator will review plans for construction or modification for the purpose of providing technical advice to the owner or operator.

(b) (1) A separate request shall be submitted for each construction or modification project.

(2) Each request shall identify the location of such project, and be accompanied by technical information describing the proposed nature, size, design, and method of operation of each affected facility involved in such project, including information on any equipment to be used for measurement or control of emissions.

(c) Neither a request for plans review nor advice furnished by the Administrator in response to such request shall (1) relieve an owner or operator of legal responsibility for compliance with any provision of this part or of any applicable State or local requirement, or (2) prevent the Administrator from implementing or enforcing any provision of this part or taking any other action authorized by the Act.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974]

Sec. 60.7 Notification and record keeping.

(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

(1) A notification of the date construction (or reconstruction as defined under Sec. 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

(2) [Reserved]

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically

exempted under an applicable **subpart** or in Sec. 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with Sec. 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

(6) A notification of the anticipated date for conducting the opacity observations required by Sec. 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by Sec. 60.8 in lieu of Method 9 observation data as allowed by Sec. 60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

(b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

(c) Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable **subpart**; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following

the end of each six-month period. Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with Sec. 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(d) The summary report form shall contain the information and be in the format shown in figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Sec. 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Sec. 60.7(c) shall both be submitted.

Figure 1--Summary Report--Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant (Circle One -- SO_2/NO_x/TRS/H_2S/CO/Opacity)
Reporting period dates: From _____ to _____
Company:

Emission Limitation_____
Address:
Monitor Manufacturer and Model No._____
Date of Latest CMS Certification or Audit_____
Process Unit(s) Description:
Total source operating time in reporting period [1]_____

CMS performance
Emission data summary[1]
summary[1]

1. Duration of excess 1. CMS downtime in emissions in reporting period due period due to:

   a. Startup/shutdown

   b. Monitor equipment malfunctions.

   c. Control equipment

   d. Non-Monitor problems. Equipment malfunctions.

   e. Process problems

   f. Quality assurance calibration.

   g. Other known causes

   h. Other known causes.

   i. Unknown causes

2. Total duration of excess

3. Total CMS Downtime emission.

4. Total duration of excess % [2]

5. [Total CMS % [2] emissions x (100) [Total Downtime] x (100) source operating time]. [Total source operating time].

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and

the excess emission report described in Sec. 60.7(c) shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

_____

Name

_____

Signature

_____

Title

_____

Date

(e) (1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable **subpart** to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this **subpart** and the applicable standard; and

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning

the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.

(f) Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

(1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard

through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(g) If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.

(h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

[36 FR 24877, Dec. 28, 1971, as amended at 40 FR 46254, Oct. 6, 1975; 40 FR 58418, Dec. 16, 1975; 45 FR 5617, Jan. 23, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 52 FR 9781, Mar. 26, 1987; 55 FR 51382, Dec. 13, 1990; 59 FR 12428, Mar. 16, 1994; 59 FR 47265, Sep. 15, 1994; 64 FR 7463, Feb. 12, 1999]

Sec. 60.8 Performance tests.

(a) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the

Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable **subpart** unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable **subpart**, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974; 42 FR 57126, Nov. 1, 1977; 44 FR 33612, June 11, 1979; 54 FR 6662, Feb. 14, 1989; 54 FR 21344, May 17, 1989; 64 FR 7463, Feb. 12, 1999]

Sec. 60.9 Availability of information.

The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter. (Information submitted voluntarily to the Administrator for the purposes of Secs. 60.5 and 60.6 is governed by Secs. 2.201 through 2.213 of this chapter and not by Sec. 2.301 of this chapter.)

Sec. 60.10 State authority.

The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from:

(a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.

(b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.

Sec. 60.11 Compliance with standards and maintenance requirements.

(a) Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by Sec. 60.8, unless otherwise specified in the applicable standard.

(b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in paragraph (e)(5) of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(e) (1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in Sec. 60.8 unless one of the following conditions apply. If no performance test under Sec. 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but

no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under Sec. 60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in Sec. 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under Sec. 60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in paragraph (e)(5) of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of this part, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

(2) Except as provided in paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under Sec. 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the

opacity observations concurrent with the initial performance test.

(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in Sec. 60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of paragraph (e)(1) of this section shall apply.

(4) An owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by Sec. 60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and Sec. 60.8 performance test results.

(5) An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under Sec. 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under Sec. 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under Sec. 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under Sec. 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under Sec. 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the

COMS meets the requirements specified in Sec. 60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine compliance with the opacity standard.

(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by Sec. 60.8, the opacity observation results and observer certification required by Sec. 60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by Sec. 60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with Sec. 60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.

(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the Federal Register.

(f) Special provisions set forth under an applicable **subpart** shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[38 FR 28565, Oct. 15, 1973, as amended at 39 FR 39873, Nov. 12, 1974; 43 FR 8800, Mar. 3, 1978; 45 FR 23379, Apr. 4, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 51 FR 1790, Jan. 15, 1986; 52 FR 9781, Mar. 26, 1987; 62 FR 8328, Feb. 24, 1997; 65 FR 61749, Oct. 17, 2000]

Sec. 60.12 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[39 FR 9314, Mar. 8, 1974]

Sec. 60.13 Monitoring requirements.

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B to this part and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to this part, unless otherwise specified in an applicable **subpart** or by the Administrator. Appendix F is applicable December 4, 1987.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under Sec. 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

(c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under Sec. 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of this part before the performance test required under Sec. 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under Sec. 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part, The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under Sec. 60.8 and as described in Sec. 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of this section at least 10 days before the performance test required under Sec. 60.8 is conducted.

(2) Except as provided in paragraph (c)(1) of this section, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d) (1) Owners and operators of a CEMS installed in accordance with the provisions of this part, must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. Owners and operators of a COMS installed in accordance with the provisions of this part, must automatically, intrinsic to the opacity monitor, check the zero and upscale (span) calibration drifts at least once daily. For a particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the

applicable version of PS-1 in appendix B of this part. For continuous monitoring systems measuring opacity of emissions not using automatic zero adjustments, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments. For systems using automatic zero adjustments, the optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of this section, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by paragraph (c) of this section for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of this part shall be used.

(g) (1) When more than one continuous monitoring system is used to measure the emissions from only one affected

facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless installation of fewer systems is approved by the Administrator.

(2) When the effluents from two or more affected facilities subject to the same opacity standard are combined before being released to the atmosphere, the owner or operator may either install a continuous opacity monitoring system at a location monitoring the combined effluent or install an opacity combiner system comprised of opacity and flow monitoring systems on each stream, and shall report as per Sec. 60.7(c) on the combined effluent. When the affected facilities are not subject to the same opacity standard, the owner or operator shall report the results as per Sec. 60.7(c) on the combined effluent against the most stringent opacity standard applicable, except for documented periods of shutdown of the affected facility, subject to the most stringent opacity standard. During such times, the next most stringent opacity standard shall apply.

(3) When the effluents from two or more affected facilities subject to the same emissions standard, other than opacity, are combined before being released to the atmosphere, the owner or operator may install applicable continuous emission monitoring systems on each effluent or on the combined effluent. The owner or operator may report the results as required for each affected facility or for the combined effluent. When the affected facilities are not subject to the same emissions standard, separate continuous emission monitoring systems shall be installed on each effluent and the owner or operator shall report as required for each affected facility.

(h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in Sec. 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the

data averages computed under this paragraph. For owners and operators complying with the requirements in Sec. 60.7(f) (1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any **subpart**.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but

adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.

(j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:

(1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in Section 8.4 of Performance Specification 2 and substitute the procedures in Section 16.0 if the results of a performance test conducted according to the requirements in Sec. 60.8 of this **subpart** or other tests performed following the criteria in Sec. 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in Section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure, that the CEMS data indicate that the source emissions are approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., Sec. 60.45(g) (2) and (3), Sec. 60.73(e), and Sec. 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in Section 8.4 of Performance Specification 2.

[40 FR 46255, Oct. 6, 1975; 40 FR 59205, Dec. 22, 1975, as amended at 41 FR 35185, Aug. 20, 1976; 48 FR 13326, Mar. 30, 1983; 48 FR 23610, May 25, 1983; 48 FR 32986, July 20, 1983; 52 FR 9782, Mar. 26, 1987; 52 FR 17555, May 11, 1987; 52 FR 21007, June 4, 1987; 64 FR 7463, Feb. 12, 1999; 65 FR 48920, Aug. 10, 2000; 65 FR 61749, Oct. 17, 2000]

Editorial Note: At 65 FR 61749, Oct. 17, 2000, Sec. 60.13 was amended by revising the words "ng/J of pollutant" to read "ng of pollutant per J of heat input" in the sixth sentence of paragraph (h). However, the amendment could not be incorporated because the words "ng/J of pollutant" do not exist in the sixth sentence of paragraph (h).

Sec. 60.14 Modification.

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which

there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and Sec. 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by Sec. 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable **subpart** of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.

(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA)

are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(j) (1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.

(2) This exemption shall not apply to any new unit that:

(i) Is designated as a replacement for an existing unit;

(ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and

(iii) Is located at a different site than the existing unit.

(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A temporary clean coal control technology demonstration project, for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

[40 FR 58419, Dec. 16, 1975, as amended at 43 FR 34347, Aug. 3, 1978; 45 FR 5617, Jan. 23, 1980; 57 FR 32339, July 21, 1992; 65 FR 61750, Oct. 17, 2000]

Sec. 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and

(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

(1) Name and address of the owner or operator.

(2) The location of the existing facility.

(3) A brief description of the existing facility and the components which are to be replaced.

(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.

(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

(6) The estimated life of the existing facility after the replacements.

(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under paragraph (e) shall be based on:

(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;

(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[40 FR 58420, Dec. 16, 1975]

Sec. 60.16 Priority list.

Prioritized Major Source Categories

Priority Number[1]	Source Category
1.	Synthetic Organic Chemical Manufacturing Industry (SOCMI) and Volatile Organic Liquid Storage Vessels and Handling Equipment
	(a) SOCMI unit processes
	(b) Volatile organic liquid (VOL) storage vessels and handling equipment
	(c) SOCMI fugitive sources
	(d) SOCMI secondary sources
2.	Industrial Surface Coating: Cans
3.	Petroleum Refineries: Fugitive Sources
4.	Industrial Surface Coating: Paper
5.	Dry Cleaning

(a) Perchloroethylene

(b) Petroleum solvent

6. Graphic Arts

7. Polymers and Resins: Acrylic Resins

8. Mineral Wool (Deleted)

9. Stationary Internal Combustion Engines

10. Industrial Surface Coating: Fabric

11. Industrial-Commercial-Institutional Steam Generating Units.

12. Incineration: Non-Municipal (Deleted)

13. Non-Metallic Mineral Processing

14. Metallic Mineral Processing

15. Secondary Copper (Deleted)

16. Phosphate Rock Preparation

17. Foundries: Steel and Gray Iron

18. Polymers and Resins: Polyethylene

19. Charcoal Production

20. Synthetic Rubber

(a) Tire manufacture

(b) SBR production

21. Vegetable Oil

22. Industrial Surface Coating: Metal Coil

23. Petroleum Transportation and Marketing

24. By-Product Coke Ovens

25. Synthetic Fibers

26. Plywood Manufacture

27. Industrial Surface Coating: Automobiles

28. Industrial Surface Coating: Large Appliances

29. Crude Oil and Natural Gas Production
30. Secondary Aluminum
31. Potash (Deleted)
32. Lightweight Aggregate Industry: Clay, Shale, and Slate[2]
33. Glass
34. Gypsum
35. Sodium Carbonate
36. Secondary Zinc (Deleted)
37. Polymers and Resins: Phenolic
38. Polymers and Resins: Urea-Melamine
39. Ammonia (Deleted)
40. Polymers and Resins: Polystyrene
41. Polymers and Resins: ABS-SAN Resins
42. Fiberglass
43. Polymers and Resins: Polypropylene
44. Textile Processing
45. Asphalt Processing and Asphalt Roofing Manufacture
46. Brick and Related Clay Products
47. Ceramic Clay Manufacturing (Deleted)
48. Ammonium Nitrate Fertilizer
49. Castable Refractories (Deleted)
50. Borax and Boric Acid (Deleted)
51. Polymers and Resins: Polyester Resins
52. Ammonium Sulfate
53. Starch
54. Perlite
55. Phosphoric Acid: Thermal Process (Deleted)

56. Uranium Refining

57. Animal Feed Defluorination (Deleted)

58. Urea (for fertilizer and polymers)

59. Detergent (Deleted) Other Source Categories

Lead acid battery manufacture[3]
Organic solvent cleaning[3]
Industrial surface coating: metal furniture[3]
Stationary gas turbines[4]
Municipal solid waste landfills[4]

[1] Low numbers have highest priority, e.g., No. 1 is high priority, No. 59 is low priority.

[2] Formerly titled "Sintering: Clay and Fly Ash".

[3] Minor source category, but included on list since an NSPS is being developed for that source category.

[4] Not prioritized, since an NSPS for this major source category has already been promulgated.

[47 FR 951, Jan. 8, 1982, as amended at 47 FR 31876, July 23, 1982; 51 FR 42796, Nov. 25, 1986; 52 FR 11428, Apr. 8, 1987; 61 FR 9919, Mar. 12, 1996]

Sec. 60.17 Incorporations by reference.

The materials listed below are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register on the date listed. These materials are incorporated as they exist on the date of the approval, and a notice of any change in these materials will be published in the Federal Register. The materials are available for purchase at the corresponding address noted below, and all are available for inspection at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC and at the Library (MD-35), U.S. EPA, Research Triangle Park, NC.

(a) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(1) ASTM A99-76, 82 (Reapproved 1987), Standard Specification for Ferromanganese, incorporation by reference (IBR) approved January 27, 1983 for Sec. 60.261.

(2) ASTM A100-69, 74, 93, Standard Specification for Ferrosilicon, IBR approved January 27, 1983 for Sec. 60.261.

(3) ASTM A101-73, 93, Standard Specification for Ferrochromium, IBR approved January 27, 1983 for Sec. 60.261.

(4) ASTM A482-76, 93, Standard Specification for Ferrochrome silicon, IBR approved January 27, 1983 for Sec. 60.261.

(5) ASTM A483-64, 74 (Reapproved 1988), Standard Specification for Silicomanganese, IBR approved January 27, 1983 for Sec. 60.261.

(6) ASTM A495-76, 94, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved January 27, 1983 for Sec. 60.261.

(7) ASTM D86-78, 82, 90, 93, 95, 96, Distillation of Petroleum Products, IBR approved for Secs. 60.562-2(d), 60.593(d), and 60.633(h).

(8) ASTM D129-64, 78, 95, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for Appendix A: Method 19, Section 12.5.2.2.3; and Sec. 60.106(j)(2).

(9) ASTM D240-76, 92, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved January 27, 1983 for Secs. 60.46(c), 60.296(b), and Appendix A: Method 19, Section 12.5.2.2.3.

(10) ASTM D270-65, 75, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved January 27, 1983 for Appendix A: Method 19, Section 12.5.2.2.1.

(11) ASTM D323-82, 94, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved April 8, 1987 for Secs. 60.111(l), 60.111a(g), 60.111b(g), and 60.116b(f)(2)(ii).

(12) ASTM D388-77, 90, 91, 95, 98a, Standard Specification for Classification of Coals by Rank, IBR approved for Secs. 60.41(f), 60.45(f)(4)(i), 60.45(f)(4)(ii), 60.45(f)(4)(vi), 60.41a, 60.41b, and 60.251(b) and (c).

(13) ASTM D396-78, 89, 90, 92, 96, 98, Standard Specification for Fuel Oils, IBR approved for Secs. 60.41b, 60.41c, 60.111(b), and 60.111a(b).

(14) ASTM D975-78, 96, 98a, Standard Specification for Diesel Fuel Oils, IBR approved January 27, 1983 for Secs. 60.111(b) and 60.111a(b).

(15) ASTM D1072-80, 90 (Reapproved 1994), Standard Method for Total Sulfur in Fuel Gases, IBR approved July 31, 1984 for Sec. 60.335(d).

(16) ASTM D1137-53, 75, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved January 27, 1983 for Sec. 60.45(f)(5)(i).

(17) ASTM D1193-77, 91, Standard Specification for Reagent Water, IBR approved for Appendix A: Method 5, Section 7.2.3; Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; Method 6, Section 7.2.1; Method 7, Section 7.2.1; Method 7C, Section 7.2.1; Method 7D, Section 7.2.1; Method 10A, Section 7.2.1; Method 11, Section 7.2.3; Method 12, Section 7.2.3; Method 13A, Section 7.2.2; Method 26, Section 7.2.2; Method 26A, Section 7.2.2; and Method 29, Section 7.2.2.

(18) ASTM D1266-87, 91, 98, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved August 17, 1989 for Sec. 60.106(j)(2).

(19) ASTM D1475-60 (Reapproved 1980), 90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved January 27, 1983 for Sec. 60.435(d)(1), Appendix A: Method 24, Section 6.1; and Method 24A, Sections 6.5 and 7.2.

(20) ASTM D1552-83, 95, Standard Test Method for Sulfur in Petroleum Products (High Temperature Method), IBR approved for Appendix A: Method 19, Section 12.5.2.2.3; and Sec. 60.106(j)(2).

(21) ASTM D1826-77, 94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved January 27, 1983 for Secs. 60.45(f)(5)(ii), 60.46(c)(2), 60.296(b)(3), and Appendix A: Method 19, Section 12.3.2.4.

(22) ASTM D1835-87, 91, 97, Standard Specification for Liquefied Petroleum (LP) Gases, approved for Secs. 60.41b and 60.41c.

(23) ASTM D1945-64, 76, 91, 96, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved January 27, 1983 for Sec. 60.45(f)(5)(i).

(24) ASTM D1946-77, 90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for Secs. 60.45(f)(5)(i), 60.18(f)(3), 60.614(e)(2)(ii), 60.614(e)(4), 60.664(e)(2)(ii), 60.664(e)(4), 60.564(f)(1), 60.704(d)(2)(ii), and 60.704(d)(4).

(25) ASTM D2013-72, 86, Standard Method of Preparing Coal Samples for Analysis, IBR approved January 27, 1983, for Appendix A: Method 19, Section 12.5.2.1.3.

(26) ASTM D2015-77 (Reapproved 1978), 96, Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved January 27, 1983 for Sec. 60.45(f)(5)(ii), 60.46(c)(2), and Appendix A: Method 19, Section 12.5.2.1.3.

(27) ASTM D2016-74, 83, Standard Test Methods for Moisture Content of Wood, IBR approved for Appendix A: Method 28, Section 16.1.1.

(28) ASTM D2234-76, 96, 97b, 98, Standard Methods for Collection of a Gross Sample of Coal, IBR approved January 27, 1983 for Appendix A: Method 19, Section 12.5.2.1.1.

(29) ASTM D2369-81, 87, 90, 92, 93, 95, Standard Test Method for Volatile Content of Coatings, IBR approved January 27, 1983 for Appendix A: Method 24, Section 6.2.

(30) ASTM D2382-76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for Secs. 60.18(f)(3), 60.485(g)(6), 60.614(e)(4), 60.664(e)(4), 60.564(f)(3), and 60.704(d)(4).

(31) ASTM D2504-67, 77, 88 (Reapproved 1993), Noncondensable Gases in C_3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for Sec. 60.485(g)(5).

(32) ASTM D2584-68 (Reapproved 1985), 94, Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved February 25, 1985 for Sec. 60.685(c)(3)(i).

(33) ASTM D2622-87, 94, 98, Standard Test Method for Sulfur in Petroleum Products by X-Ray Spectrometry, IBR approved August 17, 1989 for Sec. 60.106(j)(2).

(34) ASTM D2879-83, 96, 97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved April 8, 1987 for Secs. 60.485(e)(1), 60.111b(f)(3), 60.116b(e)(3)(ii), and 60.116b(f)(2)(i).

(35) ASTM D2880-78, 96, Standard Specification for Gas Turbine Fuel Oils, IBR approved January 27, 1983 for Secs. 60.111(b), 60.111a(b), and 60.335(d).

(36) ASTM D2908-74, 91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for Sec. 60.564(j).

(37) ASTM D2986-71, 78, 95a, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved January 27, 1983 for Appendix A: Method 5, Section 7.2.1; Method 12, Section 7.2.1; and Method 13A, Section 7.2.1.2.

(38) ASTM D3031-81, Standard Test Method for Total Sulfur in Natural Gas by Hydrogenation, IBR approved July 31, 1984 for Sec. 60.335(d).

(39) ASTM D3173-73, 87, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved January 27, 1983 for Appendix A: Method 19, Section 12.5.2.1.3.

(40) ASTM D3176-74, 89, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved January 27, 1983 for Sec. 60.45(f)(5)(i) and Appendix A: Method 19, Section 12.3.2.3.

(41) ASTM D3177-75, 89, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved January 27, 1983 for Appendix A: Method 19, Section 12.5.2.1.3.

(42) ASTM D3178-73 (Reapproved 1979), 89, Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved January 27, 1983 for Sec. 60.45(f)(5)(i).

(43) ASTM D3246-81, 92, 96, Standard Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved July 31, 1984 for Sec. 60.335(d).

(44) ASTM D3270-73T, 80, 91, 95, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and

Plant Tissues (Semiautomated Method), IBR approved for Appendix A: Method 13A, Section 16.1.

(45) ASTM D3286-85, 96, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.

(46) ASTM D3370-76, 95a, Standard Practices for Sampling Water, IBR approved for Sec. 60.564(j).

(47) ASTM D3792-79, 91, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved January 27, 1983 for Appendix A: Method 24, Section 6.3.

(48) ASTM D4017-81, 90, 96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved January 27, 1983 for Appendix A: Method 24, Section 6.4.

(49) ASTM D4057-81, 95, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for Appendix A: Method 19, Section 12.5.2.2.3.

(50) ASTM D4084-82, 94, Standard Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved July 31, 1984 for Sec. 60.335(d).

(51) ASTM D4177-95, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for Appendix A: Method 19, 12.5.2.2.1.

(52) ASTM D4239-85, 94, 97, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.

(53) ASTM D4442-84, 92, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for Appendix A: Method 28, Section 16.1.1.

(54) ASTM D4444-92, Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters, IBR approved for Appendix A: Method 28, Section 16.1.1.

(55) ASTM D4457-85 (Reapproved 1991), Test Method for Determination of Dichloromethane and 1, 1, 1-Trichloroethane in Paints and Coatings by Direct

Injection into a Gas Chromatograph, IBR approved for Appendix A: Method 24, Section 6.5.

(56) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for Secs. 60.18(f)(3), 60.485(g)(6), 60.564(f)(3), 60.614(d)(4), 60.664(e)(4), and 60.704(d)(4).

(57) ASTM D5403-93, Standard Test Methods for Volatile Content of Radiation Curable Materials. IBR approved September 11, 1995 for Appendix A: Method 24, Section 6.6.

(58) ASTM D5865-98, Standard Test Method for Gross Calorific Value of Coal and Coke. IBR approved for Sec. 60.45(f)(5)(ii), 60.46(c)(2), and Appendix A: Method 19, Section 12.5.2.1.3.

(59) ASTM E168-67, 77, 92, General Techniques of Infrared Quantitative Analysis, IBR approved for Secs. 60.593(b)(2) and 60.632(f).

(60) ASTM E169-63, 77, 93, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for Secs. 60.593(b)(2) and 60.632(f).

(61) ASTM E260-73, 91, 96, General Gas Chromatography Procedures, IBR approved for Secs. 60.593(b)(2) and 60.632(f).

(62)-(63) [Reserved]

(64) ASTM D 6216-98 Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications, IBR approved February 6, 2001 for appendix B, PS-1.

(b) The following material is available for purchase from the Association of Official Analytical Chemists, 1111 North 19th Street, Suite 210, Arlington, VA 22209.

(1) AOAC Method 9, Official Methods of Analysis of the Association of Official Analytical Chemists, 11th edition, 1970, pp. 11-12, IBR approved January 27, 1983 for Secs. 60.204(b)(3), 60.214(b)(3), 60.224(b)(3), 60.234(b)(3).

(c) The following material is available for purchase from the American Petroleum Institute, 1220 L Street NW., Washington, DC 20005.

(1) API Publication 2517, Evaporation Loss from External Floating Roof Tanks, Second Edition, February 1980,

IBR approved January 27, 1983, for Secs. 60.111(i), 60.111a(f), 60.111a(f)(1) and 60.116b(e)(2)(i).

(d) The following material is available for purchase from the Technical Association of the Pulp and Paper Industry (TAPPI), Dunwoody Park, Atlanta, GA 30341.

(1) TAPPI Method T624 os-68, IBR approved January 27, 1983 for Sec. 60.285(d)(3).

(e) The following material is available for purchase from the Water Pollution Control Federation (WPCF), 2626 Pennsylvania Avenue NW., Washington, DC 20037.

(1) Method 209A, Total Residue Dried at 103-105 deg. C, in Standard Methods for the Examination of Water and Wastewater, 15th Edition, 1980, IBR approved February 25, 1985 for Sec. 60.683(b).

(f) The following material is available for purchase from the following address: Underwriter's Laboratories, Inc. (UL), 333 Pfingsten Road, Northbrook, IL 60062.

(1) UL 103, Sixth Edition revised as of September 3, 1986, Standard for Chimneys, Factory-built, Residential Type and Building Heating Appliance.

(g) The following material is available for purchase from the following address: West Coast Lumber Inspection Bureau, 6980 SW. Barnes Road, Portland, OR 97223.

(1) West Coast Lumber Standard Grading Rules No. 16, pages 5-21 and 90 and 91, September 3, 1970, revised 1984.

(h) The following material is available for purchase from the American Society of Mechanical Engineers (ASME), 345 East 47th Street, New York, NY 10017.

(1) ASME QRO-1-1994, Standard for the Qualification and Certification of Resource Recovery Facility Operators, IBR approved for Secs. 60.56a, 60.54b(a), 60.54b(b), 60.1185(a), 60.1185(c)(2), 60.1675(a), and 60.1675(c)(2).

(2) ASME PTC 4.1-1964 (Reaffirmed 1991), Power Test Codes: Test Code for Steam Generating Units (with 1968 and 1969 Addenda), IBR approved for Secs. 60.46b, 60.58a(h)(6)(ii), 60.58b(i)(6)(ii), 60.1320(a)(3) and 60.1810(a)(3).

(3) ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th Edition (1971), IBR approved for Secs.

60.58a(h)(6)(ii), 60.58b(i)(6)(ii), 60.1320(a)(4), and 60.1810(a)(4).

(i) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 Third Edition (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August, 1993), IIB (January 1995), and III (December 1996). This document may be obtained from the U.S. EPA, Office of Solid Waste and Emergency Response, Waste Characterization Branch, Washington, DC 20460, and is incorporated by reference for appendix A to part 60, Method 29, Sections 7.5.34; 9.2.1; 9.2.3; 10.2; 10.3; 11.1.1; 11.1.3; 13.2.1; 13.2.2; 13.3.1; and Table 29-3.

(j) "Standard Methods for the Examination of Water and Wastewater," 16th edition, 1985. Method 303F: "Determination of Mercury by the Cold Vapor Technique." This document may be obtained from the American Public Health Association, 1015 18th Street, NW., Washington, DC 20036, and is incorporated by reference for appendix A to part 60, Method 29, Sections 9.2.3; 10.3; and 11.1.3.

(k) This material is available for purchase from the American Hospital Association (AHA) Service, Inc., Post Office Box 92683, Chicago, Illinois 60675-2683. You may inspect a copy at EPA's Air and Radiation Docket and Information Center (Docket A-91-61, Item IV-J-124), Room M-1500, 1200 Pennsylvania Ave., NW., Washington, DC.

(1) An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities. American Society for Health Care Environmental Services of the American Hospital Association. Chicago, Illinois. 1993. AHA Catalog No. 057007. ISBN 0-87258-673-5. IBR approved for Sec. 60.35e and Sec. 60.55c.

(l) This material is available for purchase from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161. You may inspect a copy at EPA's Air and Radiation Docket and Information Center (Docket A-91-61, Item IV-J-125), Room M-1500, 1200 Pennsylvania Ave., NW., Washington, DC.

(1) OMB Bulletin No. 93-17: Revised Statistical Definitions for Metropolitan Areas. Office of Management and Budget, June 30, 1993. NTIS No. PB 93-192-664. IBR approved for Sec. 60.31e.

[48 FR 3735, Jan. 27, 1983]

Editorial Note: For Federal Register citations affecting Sec. 60.17, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

Sec. 60.18 General control device requirements.

(a) Introduction. This section contains requirements for control devices used to comply with applicable subparts of parts 60 and 61. The requirements are placed here for administrative convenience and only apply to facilities covered by subparts referring to this section.

(b) Flares. Paragraphs (c) through (f) apply to flares.

(c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

(i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, V_{max}, as determined by the following equation:

$$V_{max} = (X_{H2} - K_1) * K_2$$

Where:

V_{max} = Maximum permitted velocity, m/sec.

K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

X_{H2} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in Sec. 60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

(4) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(6).

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this **subpart** shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

(e) Flares used to comply with provisions of this **subpart** shall be operated at all times when emissions may be vented to them.

(f) (1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this **subpart**. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C;

K = Cons tan t,

$$1.740 \times 10^{-17} \left(\frac{1}{ppm}\right)\left(\frac{g\ mole}{scm}\right)\left(\frac{MJ}{kcal}\right)$$

where the s tan dard temperature for $\left(\frac{g\ mole}{scm}\right)$ is 20°C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in Sec. 60.17); and

H_i = Net heat of combustion of sample component i, kcal/g mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in Sec. 60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, V_{max}, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

$$Log_{10} (V_{max}) = (H_T + 28.8)/31.7$$

V_{max} = Maximum permitted velocity, M/sec
28.8 = Constant
31.7 = Constant
H_T = The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation.

$$V_{max} = 8.706 + 0.7084 (H_T)$$

V_{max} = Maximum permitted velocity, m/sec
8.706 = Constant
0.7084 = Constant
H_T = The net heating value as determined in paragraph (f)(3).

[51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000]

Sec. 60.19 General notification and reporting requirements.

(a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.

(b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers

that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.

(c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable **subpart** in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable **subpart** in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(f) (1) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, the owner or operator

of an affected facility remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

[59 FR 12428, Mar. 16, 1994, as amended at 64 FR 7463, Feb. 12, 1998]

TITLE 40--PROTECTION OF ENVIRONMENT

CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY

PART 60--STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES--
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Subpart D--Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971

Sec. 60.40 Applicability and designation of affected facility.

(a) The affected facilities to which the provisions of this **subpart** apply are:

(1) Each fossil-fuel-fired steam generating unit of more than 73 megawatts heat input rate (250 million Btu per hour).

(2) Each fossil-fuel and wood-residue-fired steam generating unit capable of firing fossil fuel at a heat input rate of more than 73 megawatts (250 million Btu per hour).

(b) Any change to an existing fossil-fuel-fired steam generating unit to accommodate the use of combustible materials, other than fossil fuels as defined in this **subpart**, shall not bring that unit under the applicability of this **subpart**.

(c) Except as provided in paragraph (**d**) of this section, any facility under paragraph (a) of this section that commenced construction or modification after August 17, 1971, is subject to the requirements of this **subpart**.

(**d**) The requirements of Secs. 60.44 (a)(4), (a)(5), (b) and (**d**), and 60.45(f)(4)(vi) are applicable to lignite-fired steam generating units that commenced construction or modification after December 22, 1976.

(e) Any facility covered under **subpart** Da is not covered under this **subpart**.

[42 FR 37936, July 25, 1977, as amended at 43 FR 9278, Mar 7, 1978; 44 FR 33612, June 17, 1979]

Sec. 60.41 Definitions.

As used in this **subpart**, all terms not defined herein shall have the meaning given them in the Act, and in **subpart** A of this part.

(a) Fossil-fuel fired steam generating unit means a furnace or boiler used in the process of burning fossil fuel for the purpose of producing steam by heat transfer.

(b) Fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.

(c) Coal refuse means waste-products of coal mining, cleaning, and coal preparation operations (e.g. culm, gob, etc.) containing coal, matrix material, clay, and other organic and inorganic material.

(d) Fossil fuel and wood residue-fired steam generating unit means a furnace or boiler used in the process of burning fossil fuel and wood residue for the purpose of producing steam by heat transfer.

(e) Wood residue means bark, sawdust, slabs, chips, shavings, mill trim, and other wood products derived from wood processing and forest management operations.

(f) Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388-77, 90, 91, 95, or 98a (incorporated by reference--see Sec. 60.17).

[39 FR 20791, June 14, 1974, as amended at 40 FR 2803, Jan. 16, 1975; 41 FR 51398, Nov. 22, 1976; 43 FR 9278, Mar. 7, 1978; 48 FR 3736, Jan. 27, 1983; 65 FR 61752, Oct. 17, 2000]

Sec. 60.42 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this **subpart** shall cause to be discharged into the atmosphere from any affected facility any gases which:

(1) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel or fossil fuel and wood residue.

(2) Exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.

(b) (1) On or after December 28, 1979, no owner or operator shall cause to be discharged into the atmosphere from the Southwestern Public Service Company's Harrington Station #1, in Amarillo, TX, any gases which exhibit greater than 35 percent opacity, except that a maximum or 42 percent opacity shall be permitted for not more than 6 minutes in any hour.

(2) Interstate Power Company shall not cause to be discharged into the atmosphere from its Lansing

Station Unit No. 4 in Lansing, IA, any gases which exhibit greater than 32 percent opacity, except that a maximum of 39 percent opacity shall be permitted for not more than six minutes in any hour.

[39 FR 20792, June 14, 1974, as amended at 41 FR 51398, Nov. 22, 1976; 42 FR 61537, Dec. 5, 1977; 44 FR 76787, Dec. 28, 1979; 45 FR 36077, May 29, 1980; 45 FR 47146, July 14, 1980; 46 FR 57498, Nov. 24, 1981; 61 FR 49976, Sept. 24, 1996; 65 FR 61752, Oct. 17, 2000]

Sec. 60.43 Standard for sulfur dioxide.

(a) On and after the date on which the performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this **subpart** shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:

(1) 340 nanograms per joule heat input (0.80 lb per million Btu) derived from liquid fossil fuel or liquid fossil fuel and wood residue.

(2) 520 nanograms per joule heat input (1.2 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue, except as provided in paragraph (e) of this section.

(b) When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$$PS_{SO2} = [y(340) + z(520)]/(y + z)$$

where:

PS_{SO2} is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired,

y is the percentage of total heat input derived from liquid fossil fuel, and

z is the percentage of total heat input derived from solid fossil fuel.

(c) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.

(d) [Reserved]

(e) Units 1 and 2 (as defined in appendix G) at the Newton Power Station owned or operated by the Central Illinois

Public Service Company will be in compliance with paragraph (a)(2) of this section if Unit 1 and Unit 2 individually comply with paragraph (a)(2) of this section or if the combined emission rate from Units 1 and 2 does not exceed 470 nanograms per joule (1.1 lb per million Btu) combined heat input to Units 1 and 2.

[39 FR 20792, June 14, 1974, as amended at 41 FR 51398, Nov. 22, 1976; 52 FR 28954, Aug. 4, 1987]

Sec. 60.44 Standard for nitrogen oxides.

(a) On and after the date on which the performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this **subpart** shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO_2 in excess of:

(1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.

(2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel, liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue.

(3) 300 nanograms per joule heat input (0.70 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse).

(4) 260 nanograms per joule heat input (0.60 lb per million Btu) derived from lignite or lignite and wood residue (except as provided under paragraph (a)(5) of this section).

(5) 340 nanograms per joule heat input (0.80 lb per million Btu) derived from lignite which is mined in North Dakota, South Dakota, or Montana and which is burned in a cyclone-fired unit.

(b) Except as provided under paragraphs (c) and (d) of this section, when different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

$$PS_{NO_x} = \frac{w(260) + x(86) + y(130) + z(300)}{w + x + y + z}$$

where:

PS_{NOx} = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

w = is the percentage of total heat input derived from lignite;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel; and

z = is the percentage of total heat input derived from solid fossil fuel (except lignite).

(c) When a fossil fuel containing at least 25 percent, by weight, of coal refuse is burned in combination with gaseous, liquid, or other solid fossil fuel or wood residue, the standard for nitrogen oxides does not apply.

(d) Cyclone-fired units which burn fuels containing at least 25 percent of lignite that is mined in North Dakota, South Dakota, or Montana remain subject to paragraph (a)(5) of this section regardless of the types of fuel combusted in combination with that lignite.

[39 FR 20792, June 14, 1974, as amended at 41 FR 51398, Nov. 22, 1976; 43 FR 9278, Mar. 7, 1978; 51 FR 42797, Nov. 25, 1986]

Sec. 60.45 Emission and fuel monitoring.

(a) Each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and either oxygen or carbon dioxide except as provided in paragraph (b) of this section.

(b) Certain of the continuous monitoring system requirements under paragraph (a) of this section do not apply to owners or operators under the following conditions:

(1) For a fossil fuel-fired steam generator that burns only gaseous fossil fuel, continuous monitoring systems for measuring the opacity of emissions and sulfur dioxide emissions are not required.

(2) For a fossil fuel-fired steam generator that does not use a flue gas desulfurization device, a continuous monitoring system for measuring sulfur dioxide emissions is not required if the owner or operator

monitors sulfur dioxide emissions by fuel sampling and analysis.

(3) Notwithstanding Sec. 60.13(b), installation of a continuous monitoring system for nitrogen oxides may be delayed until after the initial performance tests under Sec. 60.8 have been conducted. If the owner or operator demonstrates during the performance test that emissions of nitrogen oxides are less than 70 percent of the applicable standards in Sec. 60.44, a continuous monitoring system for measuring nitrogen oxides emissions is not required. If the initial performance test results show that nitrogen oxide emissions are greater than 70 percent of the applicable standard, the owner or operator shall install a continuous monitoring system for nitrogen oxides within one year after the date of the initial performance tests under Sec. 60.8 and comply with all other applicable monitoring requirements under this part.

(4) If an owner or operator does not install any continuous monitoring systems for sulfur oxides and nitrogen oxides, as provided under paragraphs (b)(1) and (b)(3) or paragraphs (b)(2) and (b)(3) of this section a continuous monitoring system for measuring either oxygen or carbon dioxide is not required.

(c) For performance evaluations under Sec. 60.13(c) and calibration checks under Sec. 60.13(d), the following procedures shall be used:

(1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in Sec. 60.46(d).

(2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of appendix B to this part.

(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil Fuel	Span value for sulfur dioxide	Span value for nitrogen oxides
Gas	([1])	500
Liquid	1,000	500
Solid	1,500	1,000
Combinations	1,000y+1,500z	500(x+y)+1,000z

[1] Not applicable.

where:

x = the fraction of total heat input derived from gaseous fossil fuel, and
y = the fraction of total heat input derived from liquid fossil fuel, and
z = the fraction of total heat input derived from solid fossil fuel.

(4) All span values computed under paragraph (c)(3) of this section for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.

(5) For a fossil fuel-fired steam generator that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Administrator's approval.

(d) [Reserved]

(e) For any continuous monitoring system installed under paragraph (a) of this section, the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):

(1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$E=CF[20.9/(20.9-\text{percent } O_2)]$

where:

E, C, F, and $\%O_2$ are determined under paragraph (f) of this section.

(2) When a continuous monitoring system for measuring carbon dioxide is selected, the measurement of the

pollutant concentration and carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure shall be used:

$E=CF_c$ [100/percent CO_2]

where:

E, C, F_c and $\%CO_2$ are determined under paragraph (f) of this section.

(f) The values used in the equations under paragraphs (e) (1) and (2) of this section are derived as follows:

(1) E=pollutant emissions, ng/J (lb/million Btu).

(2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9} M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.

(3) $\%O_2$, $\%CO_2$ = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under paragraph (a) of this section.

(4) F, F_c = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_c), respectively. Values of F and F_c are given as follows:

(i) For anthracite coal as classified according to ASTM D388-77, 90, 91, 95, or 98a (incorporated by reference--see Sec. 60.17), F = 2,723 x 10^{-17} dscm/J (10,140 dscf/million Btu and F_c = 0.532 x 10^{-17} scm CO_2/J (1,980 scf CO_2/million Btu).

(ii) For subbituminous and bituminous coal as classified according to ASTM D388-77, 90, 91, 95, or 98a (incorporated by reference--see Sec. 60.17), F = 2.637 x 10^{-7} dscm/J (9,820 dscf/million Btu) and F_c = 0.486 x 10^{-7} scm CO_2/J (1,810 scf CO_2/million Btu).

(iii) For liquid fossil fuels including crude, residual, and distillate oils, F = 2.476 x 10^{-7}

dscm/J (9,220 dscf/million Btu) and F_c = 0.384 x 10^{-7} scm CO_2/J (1,430 scf CO_2/million Btu).

(iv) For gaseous fossil fuels, F = 2.347 x 10^{-7} dscm/J (8,740 dscf/million Btu). For natural gas, propane, and butane fuels, F_c = 0.279 x 10^{-7} scm CO_2/J (1,040 scf CO_2/million Btu) for natural gas, 0.322 x 10^{-7} scm CO_2/J (1,200 scf CO_2/million Btu) for propane, and 0.338 x 10^{-7} scm CO_2/J (1,260 scf CO_2/million Btu) for butane.

(v) For bark F = 2.589 x 10^{-7} dscm/J (9,640 dscf/million Btu) and F_c = 0.500 x 10^{-7} scm CO_2/J (1,840 scf CO_2/ million Btu). For wood residue other than bark F = 2.492 x 10^{-7} dscm/J (9,280 dscf/million Btu) and F_c = 0.494 x 10^{-7} scm CO_2/J (1,860 scf CO_2/ million Btu).

(vi) For lignite coal as classified according to ASTM D388-77, 90, 91, 95, or 98a (incorporated by reference--see Sec. 60.17), F = 2.659 x 10^{-7} dscm/J (9,900 dscf/million Btu) and F_c = 0.516 x 10^{-7} scm CO_2/J (1,920 scf CO_2/million Btu).

(5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/million Btu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or F_c factor (scm CO_2/J, or scf CO_2/million Btu) on either basis in lieu of the F or F_c factors specified in paragraph (f)(4) of this section:

$$F = 10^{-6}\,\frac{[227.2\,(\text{pct. H}) + 95.5\,(\text{pct. C}) + 35.6(\text{pct. S}) + 8.7(\text{pct. N})] - 28.7(\text{pct. O})}{\text{GCV}}$$

$$F_c = \frac{2.0 \times 10^{-5}\,(\text{pct. C})}{\text{GCV (SI units)}}$$

$$F = \frac{10^6[3.64(\%H) + 1.53\,(\%C) + 0.57\,(\%S) + 0.14\,(\%N) - 0.46\,(\%O)]}{\text{GCV (English Units)}}$$

$$F_c = \frac{20.0(\%\ C)}{\text{GCV (SI units)}}$$

$$F_c = \frac{321 \times 10^3(\%C)}{\text{GCV (English Units)}}$$

(i) H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen

(expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM D3178-73 (Reapproved 1979), 89, or D3176-74 or 89 (solid fuels) or computed from results using ASTM D1137-53 or 75, D1945-64, 76, 91, or 96 or D1946-77 or 90 (Reapproved 1994) (gaseous fuels) as applicable. (These five methods are incorporated by reference--see Sec. 60.17.)

(ii) GVC is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015-77 for solid fuels and D1826-77 for gaseous fuels as applicable. (These two methods are incorporated by reference--see Sec. 60.17.)

(iii) For affected facilities which fire both fossil fuels and nonfossil fuels, the F or F_c value shall be subject to the Administrator's approval.

(6) For affected facilities firing combinations of fossil fuels or fossil fuels and wood residue, the F or F_c factors determined by paragraphs (f)(4) or (f)(5) of this section shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^{n} X_i F_i \quad \text{or} \quad F_c = \sum_{i=1}^{n} X_i (F_c)_i$$

where:

X_i = the fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, wood residue, etc.)

F_i or $(F_c)_i$ = the applicable F or F_c factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n = the number of fuels being burned in combination.

(g) Excess emission and monitoring system performance reports shall be submitted to the Administrator semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in Sec. 60.7(c). Periods of excess emissions and

monitoring systems (MS) downtime that shall be reported are defined as follows:

(1) Opacity. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.

(i) For sources subject to the opacity standard of Sec. 60.42(b)(1), excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 35 percent opacity, except that one six-minute average per hour of up to 42 percent opacity need not be reported.

(ii) For sources subject to the opacity standard of Sec. 60.42(b)(2), excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 32 percent opacity, except that one six-minute average per hour of up to 39 percent opacity need not be reported.

(2) Sulfur dioxide. Excess emissions for affected facilities are defined as:

(i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under Sec. 60.43.

(3) Nitrogen oxides. Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under Sec. 60.44.

[40 FR 46256, Oct. 6, 1975]

Editorial Note 1: For Federal Register citations affecting Sec. 60.45, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

Editorial Note 2: At 65 FR 61752, Oct. 17, 2000, Sec. 60.45(f)(5)(ii) was amended by revising the words ``ASTM D1826-77'' to read ``ASTM D1826-77 or 94.'' and by revising the words ``ASTM D2015-77'' to read ``ASTM D2015-77 (Reapproved 1978), 96,

or D5865-98.'' However, this amendment could not be incorporated because these words do not exist in paragraph (f)(5)(ii).

Sec. 60.46 Test methods and procedures.

(a) In conducting the performance tests required in Sec. 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in Sec. 60.8(b). Acceptable alternative methods and procedures are given in paragraph (d) of this section.

(b) The owner or operator shall determine compliance with the particulate matter, SO_2, and NO_x standards in Secs. 60.42, 60.43, and 60.44 as follows:

(1) The emission rate (E) of particulate matter, SO_2, or NO_x shall be computed for each run using the following equation:

$$E = C F_d (20.9)/(20.9-\% O_2)$$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

$\%O_2$ = oxygen concentration, percent dry basis.

F_d = factor as determined from Method 19.

(2) Method 5 shall be used to determine the particular matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems and Method 5B shall be used to determine the particulate matter concentration (C) after FGD systems.

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train shall be set to provide an average gas temperature of 160 ±14°C (320 ±25°F).

(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration ($\%O_2$). The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for

the run shall be the arithmetic mean of the sample O_2 concentrations at all traverse points.

(iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points.

(3) Method 9 and the procedures in Sec. 60.11 shall be used to determine opacity.

(4) Method 6 shall be used to determine the SO_2 concentration.

(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.

(ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (%O_2). The O_2 sample shall be taken simultaneously with, and at the same point as, the SO_2 sample. The SO_2 emission rate shall be computed for each pair of SO_2 and O_2 samples. The SO_2 emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.

(5) Method 7 shall be used to determine the NO_x concentration.

(i) The sampling site and location shall be the same as for the SO_2 sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.

(ii) For each NO_x sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (%O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_x sample.

(iii) The NO_x emission rate shall be computed for each pair of NO_x and O_2 samples. The NO_x

emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

(c) When combinations of fossil fuels or fossil fuel and wood residue are fired, the owner or operator (in order to compute the prorated standard as shown in Secs. 60.43(b) and 60.44(b)) shall determine the percentage (w, x, y, or z) of the total heat input derived from each type of fuel as follows:

(1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.

(2) ASTM Methods D2015-77 (Reapproved 1978), 96, or D5865-98 (solid fuels), D240-76 or 92 (liquid fuels), or D1826-77 or 94 (gaseous fuels) (incorporated by reference--see Sec. 60.17) shall be used to determine the gross calorific values of the fuels. The method used to determine the calorific value of wood residue must be approved by the Administrator.

(3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.

(d) The owner or operator may use the following as alternatives to the reference methods and procedures in this section or in other sections as specified:

(1) The emission rate (E) of particulate matter, SO_2 and NO_x may be determined by using the F_c factor, provided that the following procedure is used:

(i) The emission rate (E) shall be computed using the following equation:

$$E = C\ F_c\ (100/\%CO_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

$\%CO_2$ = carbon dioxide concentration, percent dry basis.

F_c = factor as determined in appropriate sections of Method 19.

(ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O_2 and CO_2 concentration according to the procedures in paragraph (b)(2)(ii), (4)(ii), or (5)(ii) of this section. Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than ±3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., $F_{oa} = 0.209 (F_{da}/F_{ca})$, then the following procedure shall be followed:

(A) When F_o is less than 0.97 F_{oa}, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

(B) When F_o is less than 0.97 F_{oa} and when the average difference (d) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When F_o is greater than 1.03 F_{oa} and when the average difference d is positive, then E shall be decreased by that proportion over 1.03 F_{oa}, e.g., if F_o is 1.05 F_{oa}, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160°C (320°F). The procedures of sections 2.1 and 2.3 of Method 5B may be used with Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after

wet FGD systems if the effluent gas is saturated or laden with water droplets.

(3) Particulate matter and SO_2 may be determined simultaneously with the Method 5 train provided that the following changes are made:

(i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.

(ii) All applicable procedures in Method 8 for the determination of SO_2 (including moisture) are used:

(4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO_2 emission rate, under the conditions in paragraph (d)(1) of this section.

(5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O_2 concentration ($\%O_2$) for the emission rate correction factor.

(6) For Method 3, Method 3A or 3B may be used.

(7) For Method 3B, Method 3A may be used.

[54 FR 6662, Feb. 14, 1989; 54 FR 21344, May 17, 1989, as amended at 55 FR 5212, Feb. 14, 1990; 65 FR 61752, Oct. 17, 2000]

TITLE 40--PROTECTION OF ENVIRONMENT

CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY

PART 60--STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES--
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Subpart Db--Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

Sec. 60.40b Applicability and delegation of authority.

(a) The affected facility to which this **subpart** applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).

(b) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1984, but on or before June 19, 1986, is subject to the following standards:

(1) Coal-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 million Btu/hour), inclusive, are subject to the particulate matter and nitrogen oxides standards under this **subpart**.

(2) Coal-fired affected facilities having a heat input capacity greater than 73 MW (250 million Btu/hour) and meeting the applicability requirements under **subpart** D (Standards of performance for fossil-fuel-fired steam generators; Sec. 60.40) are subject to the particulate matter and nitrogen oxides standards under this **subpart** and to the sulfur dioxide standards under **subpart** D (Sec. 60.43).

(3) Oil-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 million Btu/hour), inclusive, are subject to the nitrogen oxides standards under this **subpart**.

(4) Oil-fired affected facilities having a heat input capacity greater than 73 MW (250 million Btu/hour) and meeting the applicability requirements under **subpart** D (Standards of performance for fossil-fuel-fired steam generators; Sec. 60.40) are also subject to the nitrogen oxides standards under this **subpart** and the particulate matter and sulfur dioxide standards under **subpart** D (Sec. 60.42 and Sec. 60.43).

(c) Affected facilities which also meet the applicability requirements under **subpart** J (Standards of performance for petroleum refineries; Sec. 60.104) are subject to the particulate matter and nitrogen oxides standards under this **subpart** and the sulfur dioxide standards under **subpart** J (Sec. 60.104).

(d) Affected facilities which also meet the applicability requirements under **subpart** E (Standards of performance for incinerators; Sec. 60.50) are subject to the nitrogen oxides and particulate matter standards under this **subpart**.

(e) Steam generating units meeting the applicability requirements under **subpart** Da (Standards of performance for electric utility steam generating units; Sec. 60.40a) are not subject to this **subpart**.

(f) Any change to an existing steam generating unit for the sole purpose of combusting gases containing TRS as defined under Sec. 60.281 is not considered a modification under Sec. 60.14 and the steam generating unit is not subject to this **subpart**.

(g) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the following authorities shall be retained by the Administrator and not transferred to a State.

(1) Section 60.44b(f).
(2) Section 60.44b(g).
(3) Section 60.49b(a)(4).

(h) Affected facilities which meet the applicability requirements under **subpart** Eb (Standards of performance for municipal waste combustors; Sec. 60.50b) are not subject to this **subpart**.

(i) Unless and until **subpart** GG of this part is revised to extend the applicability of **subpart** GG of this part to steam generator units subject to this **subpart**, this **subpart** will continue to apply to combined cycle gas turbines that are capable of combusting more than 29 MW (100 million Btu/hour) heat input of fossil fuel in the steam generator. Only emissions resulting from combustion of fuels in the steam generating unit are subject to this **subpart**. (The gas turbine emissions are subject to **subpart** GG of this part.)

(j) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to **Subpart** D (Standards

of Performance for Fossil-Fuel-Fired Steam Generators, Sec. 60.40).

[52 FR 47842, Dec. 16, 1987, as amended at 63 FR 49454, Sept. 16, 1998; 65 FR 61752, Oct. 17, 2000]

Sec. 60.41b Definitions.

As used in this **subpart**, all terms not defined herein shall have the meaning given them in the Act and in **subpart** A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from the fuels listed in Sec. 60.42b(a), Sec. 60.43b(a), or Sec. 60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

Byproduct/waste means any liquid or gaseous substance produced at chemical manufacturing plants, petroleum refineries, or pulp and paper mills (except natural gas, distillate oil, or residual oil) and combusted in a steam generating unit for heat recovery or for disposal. Gaseous substances with carbon dioxide levels greater than 50 percent or carbon monoxide levels greater than 10 percent are not byproduct/waste for the purpose of this **subpart**.

Chemical manufacturing plants means industrial plants which are classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 28.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388-77, 90, 91, 95, or 98a, Standard Specification for Classification of Coals by Rank (IBR--see Sec. 60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this **subpart**.

Coal refuse means any byproduct of coal mining or coal cleaning operations with an ash content greater than 50 percent, by weight, and a heating value less than 13,900 kJ/kg (6,000 Btu/lb) on a dry basis.

Combined cycle system means a system in which a separate source, such as a gas turbine, internal combustion engine, kiln, etc., provides exhaust gas to a heat recovery steam generating unit.

Conventional technology means wet flue gas desulfurization (FGD) technology, dry FGD technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98, Standard Specifications for Fuel Oils (incorporated by reference--see Sec. 60.17).

Dry flue gas desulfurization technology means a sulfur dioxide control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline slurries or solutions used in dry flue gas desulfurization technology include but are not limited to lime and sodium.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.

Emerging technology means any sulfur dioxide control system that is not defined as a conventional technology under this section, and for which the owner or operator of the facility has applied to the Administrator and received approval to operate as an emerging technology under Sec. 60.49b(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed combustion technology means combustion of fuel in a bed or series of beds (including but not limited to bubbling bed units and circulating bed units) of limestone aggregate (or other sorbent materials) in which these materials are forced upward by the flow of combustion air and the gaseous products of combustion.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Full capacity means operation of the steam generating unit at 90 percent or more of the maximum steady-state design heat input capacity.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hour) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

Heat transfer medium means any material that is used to transfer heat from one point to another point.

High heat release rate means a heat release rate greater than 730,000 J/sec-m^3 (70,000 Btu/hour-ft^3).

Lignite means a type of coal classified as lignite A or lignite B by the American Society of Testing and Materials in ASTM D388-77, 90, 91, 95, or 98a, Standard Specification for Classification of Coals by Rank (IBR--see Sec. 60.17).

Low heat release rate means a heat release rate of 730,000 J/sec-m^3 (70,000 Btu/hour-ft^3) or less.

Mass-feed stoker steam generating unit means a steam generating unit where solid fuel is introduced directly into a retort or is fed directly onto a grate where it is combusted.

Maximum heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

Municipal-type solid waste means refuse, more than 50 percent of which is waste consisting of a mixture of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials, and noncombustible materials such as glass and rock.

Natural gas means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or (2) liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835-82, 86, 87, 91, or 97, "Standard Specification for Liquid Petroleum Gases" (IBR--see Sec. 60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil.

Petroleum refinery means industrial plants as classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 29.

Potential sulfur dioxide emission rate means the theoretical sulfur dioxide emissions (ng/J, lb/million Btu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Pulp and paper mills means industrial plants which are classified by the Department of Commerce under North American Industry Classification System (NAICS) Code 322 or Standard Industrial Classification (SIC) Code 26.

Pulverized coal-fired steam generating unit means a steam generating unit in which pulverized coal is introduced into an air stream that carries the coal to the combustion chamber of the steam generating unit where it is fired in suspension. This includes both conventional pulverized coal-fired and micropulverized coal-fired steam generating units.

Residual oil means crude oil, fuel oil numbers 1 and 2 that have a nitrogen content greater than 0.05 weight percent, and all fuel oil numbers 4, 5 and 6, as defined by the American Society of Testing and Materials in ASTM D396-78, Standard Specifications for Fuel Oils (IBR--see Sec. 60.17).

Spreader stoker steam generating unit means a steam generating unit in which solid fuel is introduced to the combustion zone by a mechanism that throws the fuel onto a grate from above. Combustion takes place both in suspension and on the grate.

Steam generating unit means a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this **subpart**.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which

any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Very low sulfur oil means an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without sulfur dioxide emission control, has a sulfur dioxide emission rate equal to or less than 215 ng/J (0.5 lb/million Btu) heat input.

Wet flue gas desulfurization technology means a sulfur dioxide control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gas with an alkaline slurry or solution and forming a liquid material. This definition applies to devices where the aqueous liquid material product of this contact is subsequently converted to other forms. Alkaline reagents used in wet flue gas desulfurization technology include, but are not limited to, lime, limestone, and sodium.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of particulate matter or sulfur dioxide.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including, but not limited to, sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51819, Dec. 18, 1989; 65 FR 61752, Oct. 17, 2000; 66 FR 49834, Oct. 1, 2001]

Sec. 60.42b Standard for sulfur dioxide.

(a) Except as provided in paragraphs (b), (c), (d), or (j) of this section, on and after the date on which the performance test is completed or required to be completed under Sec. 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal or oil shall cause to be discharged into the atmosphere any gases that contain sulfur dioxide in excess of 10 percent (0.10) of the potential sulfur dioxide emission rate (90 percent reduction) and that contain sulfur dioxide in excess of the emission limit determined according to the following formula:

$$E_s = (K_a H_a + K_b H_b / (H_a + H_b)$$

where:

E_s is the sulfur dioxide emission limit, in ng/J or lb/million Btu heat input,

K_a is 520 ng/J (or 1.2 lb/million Btu),

K_b is 340 ng/J (or 0.80 lb/million Btu),

H_a is the heat input from the combustion of coal, in J (million Btu),
H_b is the heat input from the combustion of oil, in J (million Btu).

Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat input to the affected facility from exhaust gases from another source, such as gas turbines, internal combustion engines, kilns, etc.

(b) On and after the date on which the performance test is completed or required to be completed under Sec. 60.8 of this part, whichever comes first, no owner or operator of an affected facility that combusts coal refuse alone in a fluidized bed combustion steam generating unit shall cause to be discharged into the atmosphere any gases that contain sulfur dioxide in excess of 20 percent of the potential sulfur dioxide emission rate (80 percent reduction) and that contain sulfur dioxide in excess of 520 ng/J (1.2 lb/million Btu) heat input. If coal or oil is fired with coal refuse, the affected facility is subject to paragraph (a) or (d) of this section, as applicable.

(c) On and after the date on which the performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever comes first, no owner or operator of an affected facility that combusts coal or oil, either alone or in combination with any other fuel, and that uses an emerging technology for the control of sulfur dioxide emissions, shall cause to be discharged into the atmosphere any gases that contain sulfur dioxide in excess of 50 percent of the potential sulfur dioxide emission rate (50 percent reduction) and that contain sulfur dioxide in excess of the emission limit determined according to the following formula:

$$E_s = (K_c H_c + K_d H_d)/H_c + H_d)$$

where:

E_s is the sulfur dioxide emission limit, expressed in ng/J (lb/million Btu) heat input,

K_c is 260 ng/J (0.60 lb/million Btu),

K_d is 170 ng/J (0.40 lb/million Btu),

H_c is the heat input from the combustion of coal, J (million Btu),

H_d is the heat input from the combustion of oil, J (million Btu).

Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels, or from the heat input to the affected facility from exhaust gases from another source, such as gas turbines, internal combustion engines, kilns, etc.

(d) On and after the date on which the performance test is completed or required to be completed under Sec. 60.8 of this part, whichever comes first, no owner or operator of an affected facility listed in paragraphs (d) (1), (2), or (3) of this section shall cause to be discharged into the atmosphere any gases that contain sulfur dioxide in excess of 520 ng/J (1.2 lb/million Btu) heat input if the affected facility combusts coal, or 215 ng/J (0.5 lb/million Btu) heat input if the affected facility combusts oil other than very low sulfur oil. Percent reduction requirements are not applicable to affected facilities under paragraphs (d)(1), (2), or (3).

(1) Affected facilities that have an annual capacity factor for coal and oil of 30 percent (0.30) or less and are subject to a Federally enforceable permit limiting the operation of the affected facility to an annual capacity factor for coal and oil of 30 percent (0.30) or less;

(2) Affected facilities located in a noncontinental area; or

(3) Affected facilities combusting coal or oil, alone or in combination with any other fuel, in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat input to the steam generating unit is from combustion of coal and oil in the duct burner and 70 percent (0.70) or more of the heat input to the steam generating unit is from the exhaust gases entering the duct burner.

(e) Except as provided in paragraph (f) of this section, compliance with the emission limits, fuel oil sulfur

limits, and/or percent reduction requirements under this section are determined on a 30-day rolling average basis.

(f) Except as provided in paragraph (j)(2) of this section, compliance with the emission limits or fuel oil sulfur limits under this section is determined on a 24-hour average basis for affected facilities that (1) have a Federally enforceable permit limiting the annual capacity factor for oil to 10 percent or less, (2) combust only very low sulfur oil, and (3) do not combust any other fuel.

(g) Except as provided in paragraph (i) of this section, the sulfur dioxide emission limits and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(h) Reductions in the potential sulfur dioxide emission rate through fuel pretreatment are not credited toward the percent reduction requirement under paragraph (c) of this section unless:

(1) Fuel pretreatment results in a 50 percent or greater reduction in potential sulfur dioxide emissions and

(2) Emissions from the pretreated fuel (without combustion or post combustion sulfur dioxide control) are equal to or less than the emission limits specified in paragraph (c) of this section.

(i) An affected facility subject to paragraph (a), (b), or (c) of this section may combust very low sulfur oil or natural gas when the sulfur dioxide control system is not being operated because of malfunction or maintenance of the sulfur dioxide control system.

(j) Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil. The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by: (1) Following the performance testing procedures as described in Sec. 60.45b(c) or Sec. 60.45b(d), and following the monitoring procedures as described in Sec. 60.47b(a) or Sec. 60.47b(b) to determine sulfur dioxide emission rate or fuel oil sulfur content; or (2) maintaining fuel receipts as described in Sec. 60.49b(r).

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51819, Dec. 18, 1989; 65 FR 61752, Oct. 17, 2000]

Sec. 60.43b Standard for particulate matter.

(a) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever comes first, no owner or operator of an affected facility which combusts coal or combusts mixtures of coal with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/million Btu) heat input,

(i) If the affected facility combusts only coal, or

(ii) If the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/million Btu) heat input if the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels greater than 10 percent (0.10) and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(3) 86 ng/J (0.20 lb/million Btu) heat input if the affected facility combusts coal or coal and other fuels and

(i) Has an annual capacity factor for coal or coal and other fuels of 30 percent (0.30) or less,

(ii) Has a maximum heat input capacity of 73 MW (250 million Btu/hour) or less,

(iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for coal or coal and other solid fuels, and

(iv) Construction of the affected facility commenced after June 19, 1984, and before November 25, 1986.

(b) On and after the date on which the performance test is completed or required to be completed under 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil (or mixtures of oil

with other fuels) and uses a conventional or emerging technology to reduce sulfur dioxide emissions shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of 43 ng/J (0.10 lb/million Btu) heat input.

(c) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts wood, or wood with other fuels, except coal, shall cause to be discharged from that affected facility any gases that contain particulate matter in excess of the following emission limits:

(1) 43 ng/J (0.10 lb/million Btu) heat input if the affected facility has an annual capacity factor greater than 30 percent (0.30) for wood.

(2) 86 ng/J (0.20 lb/million Btu) heat input if

(i) The affected facility has an annual capacity factor of 30 percent (0.30) or less for wood,

(ii) Is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for wood, and

(iii) Has a maximum heat input capacity of 73 MW (250 million Btu/hour) or less.

(d) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts municipal-type solid waste or mixtures of municipal-type solid waste with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of the following emission limits:

(1) 43 ng/J (0.10 lb/million Btu) heat input,

(i) If the affected facility combusts only municipal-type solid waste, or

(ii) If the affected facility combusts municipal-type solid waste and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 86 ng/J (0.20 lb/million Btu) heat input if the affected facility combusts municipal-type solid waste or municipal-type solid waste and other fuels; and

(i) Has an annual capacity factor for municipal-type solid waste and other fuels of 30 percent (0.30) or less,

(ii) Has a maximum heat input capacity of 73 MW (250 million Btu/hour) or less,

(iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) for municipal-type solid waste, or municipal-type solid waste and other fuels, and

(iv) Construction of the affected facility commenced after June 19, 1984, but before November 25, 1986.

(e) For the purposes of this section, the annual capacity factor is determined by dividing the actual heat input to the steam generating unit during the calendar year from the combustion of coal, wood, or municipal-type solid waste, and other fuels, as applicable, by the potential heat input to the steam generating unit if the steam generating unit had been operated for 8,760 hours at the maximum design heat input capacity.

(f) On and after the date on which the initial performance test is completed or is required to be completed under 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

(g) The particulate matter and opacity standards apply at all times, except during periods of startup, shutdown or malfunction.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51819, Dec. 18, 1989; 65 FR 61752, Oct. 17, 2000]

Sec. 60.44b Standard for nitrogen oxides.

(a) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever date comes first, no owner or operator of an affected facility

that is subject to the provisions of this section and that combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO_2) in excess of the following emission limits:

Fuel/Steam generating unit type Btu	Nitrogen oxide emission limits ng/J (lb/million Btu) (expressed as NO_2) heat input
(1) Natural gas and distillate oil, except (4):	
(i) Low heat release rate	43 (0.10)
(ii) High heat release rate	86 (0.20)
(2) Residual oil:	
(i) Low heat release rate	130 (0.30)
(ii) High heat release rate	170 (0.40)
(3) Coal:	
(i) Mass-feed stoker	210 (0.50)
(ii) Spreader stoker and fluidized bed combustion	260 (0.60)
(iii) Pulverized coal	300 (0.70)
(iv) Lignite, except (v)	260 (0.60)

Fuel/Steam generating unit type Btu	Nitrogen oxide emission limits ng/J (lb/million Btu) (expressed as NO_2) heat input
(v) Lignite mined in North Dakota, South Dakota, or Montana and combusted in a slag tap furnace	340 (0.80)
(vi) Coal-derived synthetic fuels	210 (0.50)

(4) Duct burner used in a combined cycle system:		
(i) Natural gas and distillate oil.....	86	(0.20)
(ii) Residual oil.....	170	(0.40)

(b) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts mixtures of coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides in excess of a limit determined by the use of the following formula:

$$E_n = [(EL_{go}\ H_{go}) + (EL_{ro}\ H_{ro}) + (EL_c\ H_c]/(H_{go} + H_{ro} + H_c)$$

where:

E_n is the nitrogen oxides emission limit (expressed as NO_2), ng/J (lb/million Btu)

EL_{go} is the appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/million Btu)

H_{go} is the heat input from combustion of natural gas or distillate oil,

EL_{ro} is the appropriate emission limit from paragraph (a)(2) for combustion of residual oil,

H_{ro} is the heat input from combustion of residual oil,

EL_c is the appropriate emission limit from paragraph (a)(3) for combustion of coal, and

H_c is the heat input from combustion of coal.

(c) Except as provided under paragraph (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal or oil, or a mixture of these fuels with natural gas, and wood, municipal-type solid waste, or any other fuel shall cause to be discharged into the atmosphere any gases that contain nitrogen oxides in excess of the emission limit for the coal or oil, or mixtures of these fuels with natural gas combusted in the affected facility, as determined pursuant to paragraph (a) or (b) of this section, unless the affected facility has

an annual capacity factor for coal or oil, or mixture of these fuels with natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, or a mixture of these fuels with natural gas.

(d) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts natural gas with wood, municipal-type solid waste, or other solid fuel, except coal, shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides in excess of 130 ng/J (0.30 lb/million Btu) heat input unless the affected facility has an annual capacity factor for natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for natural gas.

(e) Except as provided under paragraph (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal, oil, or natural gas with byproduct/waste shall cause to be discharged into the atmosphere any gases that contain nitrogen oxides in excess of the emission limit determined by the following formula unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less:

$$E_n = [(EL_{go}\ H_{go}) + (EL_{ro}\ H_{ro}) + (EL_c\ H_c)]/(H_{go} + H_{ro} + H_c)$$

where:

E_n is the nitrogen oxides emission limit (expressed as NO_2), ng/J (lb/million Btu)

EL_{go} is the appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/million Btu).

H_{go} is the heat input from combustion of natural gas, distillate oil and gaseous byproduct/waste, ng/J (lb/million Btu).

EL_{ro} is the appropriate emission limit from paragraph (a)(2) for combustion of residual oil, ng/J (lb/million Btu)

H_{ro} is the heat input from combustion of residual oil and/or liquid byproduct/waste.

EL_c is the appropriate emission limit from paragraph (a)(3) for combustion of coal, and

H_c is the heat input from combustion of coal.

(f) Any owner or operator of an affected facility that combusts byproduct/waste with either natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility to establish a nitrogen oxides emission limit which shall apply specifically to that affected facility when the byproduct/waste is combusted. The petition shall include sufficient and appropriate data, as determined by the Administrator, such as nitrogen oxides emissions from the affected facility, waste composition (including nitrogen content), and combustion conditions to allow the Administrator to confirm that the affected facility is unable to comply with the emission limits in paragraph (e) of this section and to determine the appropriate emission limit for the affected facility.

(1) Any owner or operator of an affected facility petitioning for a facility-specific nitrogen oxides emission limit under this section shall:

(i) Demonstrate compliance with the emission limits for natural gas and distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) of this section, as appropriate, by conducting a 30-day performance test as provided in Sec. 60.46b(e). During the performance test only natural gas, distillate oil, or residual oil shall be combusted in the affected facility; and

(ii) Demonstrate that the affected facility is unable to comply with the emission limits for natural gas and distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) of this section, as appropriate, when gaseous or liquid byproduct/waste is combusted in the affected facility under the same conditions and using the same technological system of emission reduction applied when demonstrating

compliance under paragraph (f)(1)(i) of this section.

(2) The nitrogen oxides emission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) of this section, as appropriate, shall be applicable to the affected facility until and unless the petition is approved by the Administrator. If the petition is approved by the Administrator, a facility-specific nitrogen oxides emission limit will be established at the nitrogen oxides emission level achievable when the affected facility is combusting oil or natural gas and byproduct/waste in a manner that the Administrator determines to be consistent with minimizing nitrogen oxides emissions.

(g) Any owner or operator of an affected facility that combusts hazardous waste (as defined by 40 CFR part 261 or 40 CFR part 761) with natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility for a waiver from compliance with the nitrogen oxides emission limit which applies specifically to that affected facility. The petition must include sufficient and appropriate data, as determined by the Administrator, on nitrogen oxides emissions from the affected facility, waste destruction efficiencies, waste composition (including nitrogen content), the quantity of specific wastes to be combusted and combustion conditions to allow the Administrator to determine if the affected facility is able to comply with the nitrogen oxides emission limits required by this section. The owner or operator of the affected facility shall demonstrate that when hazardous waste is combusted in the affected facility, thermal destruction efficiency requirements for hazardous waste specified in an applicable federally enforceable requirement preclude compliance with the nitrogen oxides emission limits of this section. The nitrogen oxides emission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) of this section, as appropriate, are applicable to the affected facility until and unless the petition is approved by the Administrator. (See 40 CFR 761.70 for regulations applicable to the incineration of materials containing polychlorinated biphenyls (PCB's).)

(h) For purposes of paragraph (i) of this section, the nitrogen oxide standards under this section apply at all times including periods of startup, shutdown, or malfunction.

(i) Except as provided under paragraph (j) of this section, compliance with the emission limits under this section is determined on a 30-day rolling average basis.

(j) Compliance with the emission limits under this section is determined on a 24-hour average basis for the initial performance test and on a 3-hour average basis for subsequent performance tests for any affected facilities that:

(1) Combust, alone or in combination, only natural gas, distillate oil, or residual oil with a nitrogen content of 0.30 weight percent or less;

(2) Have a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less; and

(3) Are subject to a Federally enforceable requirement limiting operation of the affected facility to the firing of natural gas, distillate oil, and/or residual oil with a nitrogen content of 0.30 weight percent or less and limiting operation of the affected facility to a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil and a nitrogen content of 0.30 weight percent or less.

(k) Affected facilities that meet the criteria described in paragraphs (j) (1), (2), and (3) of this section, and that have a heat input capacity of 73 MW (250 million Btu/hour) or less, are not subject to the nitrogen oxides emission limits under this section.

(l) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8, whichever date comes first, no owner or operator of an affected facility which commenced construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO_2) in excess of the following limits:

(1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/J_I (0.20 lb/million Btu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas; or

(2) If the affected facility has a low heat release rate and combusts natural gas or distillate oil in excess of 30 percent of the heat input from the combustion of all fuels, a limit determined by use of the following formula:

$$E_n = [(0.10 * H_{go}) + (0.20 * H_r)]/(H_{go} + H_r)$$

Where:

E_n is the NO_X emission limit, (lb/million Btu),

H_{go} is the heat input from combustion of natural gas or distillate oil, and

H_r is the heat input from combustion of any other fuel.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51825, Dec. 18, 1989; 63 FR 49454, Sept. 16, 1998; 66 FR 42610, Aug. 14, 2001]

Sec. 60.45b Compliance and performance test methods and procedures for sulfur dioxide.

(a) The sulfur dioxide emission standards under Sec. 60.42b apply at all times.

(b) In conducting the performance tests required under Sec. 60.8, the owner or operator shall use the methods and procedures in appendix A of this part or the methods and procedures as specified in this section, except as provided in Sec. 60.8(b). Section 60.8(f) does not apply to this section. The 30-day notice required in Sec. 60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(c) The owner or operator of an affected facility shall conduct performance tests to determine compliance with the percent of potential sulfur dioxide emission rate (% P_s) and the sulfur dioxide emission rate (E_s) pursuant to Sec. 60.42b following the procedures listed below, except as provided under paragraph (d) of this section.

(1) The initial performance test shall be conducted over the first 30 consecutive operating days of the steam generating unit. Compliance with the sulfur dioxide standards shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(2) If only coal or only oil is combusted, the following procedures are used:

(i) The procedures in Method 19 are used to determine the hourly sulfur dioxide emission rate (E_{ho}) and the 30-day average emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the continuous emission monitoring system of Sec. 60.47b (a) or (b).

(ii) The percent of potential sulfur dioxide emission rate (% P_s) emitted to the atmosphere is computed using the following formula:

$$\% P_s = 100 (1 - \% R_g/100)(1 - \% R_f/100)$$

where:

% R_g is the sulfur dioxide removal efficiency of the control device as determined by Method 19, in percent.

% R_f is the sulfur dioxide removal efficiency of fuel pretreatment as determined by Method 19, in percent.

(3) If coal or oil is combusted with other fuels, the same procedures required in paragraph (c)(2) of this section are used, except as provided in the following:

(i) An adjusted hourly sulfur dioxide emission rate (E_{ho}°) is used in Equation 19-19 of Method 19 to compute an adjusted 30-day average emission rate (E_{ao}°). The E_{ho} is computed using the following formula:

$$E_h^{\circ} = [E_{ho} - E_w(1 - X_k)]/X_k$$

where:

E_{ho}° is the adjusted hourly sulfur dioxide emission rate, ng/J (lb/million Btu).

E_{ho} is the hourly sulfur dioxide emission rate, ng/J (lb/million Btu).

E_w is the sulfur dioxide concentration in fuels other than coal and oil combusted in the affected facility, as determined by the fuel sampling and analysis procedures in Method 19, ng/J (lb/million Btu). The value E_w for each fuel lot is

used for each hourly average during the time that the lot is being combusted.

X_k is the fraction of total heat input from fuel combustion derived from coal, oil, or coal and oil, as determined by applicable procedures in Method 19.

(ii) To compute the percent of potential sulfur dioxide emission rate (% P_s), an adjusted % R_g (% $R_g°$) is computed from the adjusted E_{aoo} from paragraph (b)(3)(i) of this section and an adjusted average sulfur dioxide inlet rate ($E_{ai}°$) using the following formula:

$$\% R_g° = 100 (1.0 - E_{ao}°/E_{ai}°)$$

To compute $E_{ai}°$, an adjusted hourly sulfur dioxide inlet rate ($E_{hi}°$) is used. The $E_{hi}°$ is computed using the following formula:

$$E_{hi}° = [E_{hi} - E_w(1 - X_k)]/X_k$$

where:

$E_{hi}°$ is the adjusted hourly sulfur dioxide inlet rate, ng/J (lb/million Btu).

E_{hi} is the hourly sulfur dioxide inlet rate, ng/J (lb/million Btu).

(4) The owner or operator of an affected facility subject to paragraph (b)(3) of this section does not have to measure parameters E_w or X_k if the owner or operator elects to assume that X_k =1.0. Owners or operators of affected facilities who assume X_k =1.0 shall

(i) Determine % P_s following the procedures in paragraph (c)(2) of this section, and

(ii) Sulfur dioxide emissions (E_s) are considered to be in compliance with sulfur dioxide emission limits under Sec. 60.42b.

(5) The owner or operator of an affected facility that qualifies under the provisions of Sec. 60.42b(d) does not have to measure parameters E_w or X_k under paragraph (b)(3) of this section if the owner or operator of the affected facility elects to measure sulfur dioxide emission rates of the coal or oil following the fuel sampling and analysis procedures under Method 19.

(d) Except as provided in paragraph (j), the owner or operator of an affected facility that combusts only very low sulfur oil, has an annual capacity factor for oil of 10 percent (0.10) or less, and is subject to a Federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for oil of 10 percent (0.10) or less shall:

(1) Conduct the initial performance test over 24 consecutive steam generating unit operating hours at full load;

(2) Determine compliance with the standards after the initial performance test based on the arithmetic average of the hourly emissions data during each steam generating unit operating day if a continuous emission measurement system (CEMS) is used, or based on a daily average if Method 6B or fuel sampling and analysis procedures under Method 19 are used.

(e) The owner or operator of an affected facility subject to Sec. 60.42b(d)(1) shall demonstrate the maximum design capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. This demonstration will be made during the initial performance test and a subsequent demonstration may be requested at any other time. If the 24-hour average firing rate for the affected facility is less than the maximum design capacity provided by the manufacturer of the affected facility, the 24-hour average firing rate shall be used to determine the capacity utilization rate for the affected facility, otherwise the maximum design capacity provided by the manufacturer is used.

(f) For the initial performance test required under Sec. 60.8, compliance with the sulfur dioxide emission limits and percent reduction requirements under Sec. 60.42b is based on the average emission rates and the average percent reduction for sulfur dioxide for the first 30 consecutive steam generating unit operating days, except as provided under paragraph (d) of this section. The initial performance test is the only test for which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first steam generating unit operating day of the 30 successive steam generating unit operating days is completed within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. The boiler load during the 30-day period does not have to be the maximum design load, but must be representative of future operating conditions and include at least one 24-hour period at full load.

(g) After the initial performance test required under Sec. 60.8, compliance with the sulfur dioxide emission limits and percent reduction requirements under Sec. 60.42b is based on the average emission rates and the average percent reduction for sulfur dioxide for 30 successive steam generating unit operating days, except as provided under paragraph (d). A separate performance test is completed at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate and percent reduction for sulfur dioxide are calculated to show compliance with the standard.

(h) Except as provided under paragraph (i) of this section, the owner or operator of an affected facility shall use all valid sulfur dioxide emissions data in calculating % P_s and E_{ho} under paragraph (c), of this section whether or not the minimum emissions data requirements under Sec. 60.46b are achieved. All valid emissions data, including valid sulfur dioxides emission data collected during periods of startup, shutdown and malfunction, shall be used in calculating % P_s and E_{ho} pursuant to paragraph (c) of this section.

(i) During periods of malfunction or maintenance of the sulfur dioxide control systems when oil is combusted as provided under Sec. 60.42b(i), emission data are not used to calculate % P_s or E_s under Sec. 60.42b (a), (b) or (c), however, the emissions data are used to determine compliance with the emission limit under Sec. 60.42b(i).

(j) The owner or operator of an affected facility that combusts very low sulfur oil is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in Sec. 60.49b(r).

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51820, 51825, Dec. 18, 1989]

Sec. 60.46b Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.

(a) The particulate matter emission standards and opacity limits under Sec. 60.43b apply at all times except during periods of startup, shutdown, or malfunction. The nitrogen oxides emission standards under Sec. 60.44b apply at all times.

(b) Compliance with the particulate matter emission standards under Sec. 60.43b shall be determined through performance testing as described in paragraph (d) of this section.

(c) Compliance with the nitrogen oxides emission standards under Sec. 60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.

(d) To determine compliance with the particulate matter emission limits and opacity limits under Sec. 60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under Sec. 60.8 using the following procedures and reference methods:

(1) Method 3B is used for gas analysis when applying Method 5 or Method 17.

(2) Method 5, Method 5B, or Method 17 shall be used to measure the concentration of particulate matter as follows:

(i) Method 5 shall be used at affected facilities without wet flue gas desulfurization (FGD) systems; and

(ii) Method 17 may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160°C (320°F). The procedures of sections 2.1 and 2.3 of Method 5B may be used in Method 17 only if it is used after a wet FGD system. Do not use Method 17 after wet FGD systems if the effluent is saturated or laden with water droplets.

(iii) Method 5B is to be used only after wet FGD systems.

(3) Method 1 is used to select the sampling site and the number of traverse sampling points. The sampling time for each run is at least 120 minutes and the minimum sampling volume is 1.7 dscm (60 dscf) except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(4) For Method 5, the temperature of the sample gas in the probe and filter holder is monitored and is maintained at 160 ±14 °C (320 ±25 °F).

(5) For determination of particulate matter emissions, the oxygen or carbon dioxide sample is obtained simultaneously with each run of Method 5, Method 5B or Method 17 by traversing the duct at the same sampling location.

(6) For each run using Method 5, Method 5B or Method 17, the emission rate expressed in nanograms per joule heat input is determined using:

(i) The oxygen or carbon dioxide measurements and particulate matter measurements obtained under this section,

(ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19.

(7) Method 9 is used for determining the opacity of stack emissions.

(e) To determine compliance with the emission limits for nitrogen oxides required under Sec. 60.44b, the owner or operator of an affected facility shall conduct the performance test as required under Sec. 60.8 using the continuous system for monitoring nitrogen oxides under Sec. 60.48(b).

(1) For the initial compliance test, nitrogen oxides from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the nitrogen oxides emission standards under Sec. 60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(2) Following the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever date comes first, the owner or operator of an affected facility which combusts coal or which combusts residual oil having a nitrogen content greater than 0.30 weight percent shall determine compliance with the nitrogen oxides emission standards under Sec. 60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days.

(3) Following the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of this part, whichever date comes first, the owner or operator of an affected facility which has a heat input capacity greater than 73 MW (250 million Btu/hour) and which combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall determine compliance with the nitrogen oxides

standards under Sec. 60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days.

(4) Following the date on which the initial performance test is completed or required to be completed under Sec. 60.8 of this part, whichever date comes first, the owner or operator of an affected facility which has a heat input capacity of 73 MW (250 million Btu/hour) or less and which combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the nitrogen oxides standards under Sec. 60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, nitrogen oxides emissions data collected pursuant to Sec. 60.48b(g)(1) or Sec. 60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the nitrogen oxides emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days.

(5) f the owner or operator of an affected facility which combusts residual oil does not sample and analyze the residual oil for nitrogen content, as specified in Sec. 60.49b(e), the requirements of paragraph (iii) of this section apply and the provisions of paragraph (iv) of this section are inapplicable.

(f) To determine compliance with the emissions limits for NO_x required by Sec. 60.44b(a)(4) or Sec. 60.44b(l) for duct burners used in combined cycle systems, either of the procedures described in paragraph (f)(1) or (2) of this section may be used:

(1) The owner or operator of an affected facility shall conduct the performance test required under Sec. 60.8 as follows:

(i) The emissions rate (E) of NO_x shall be computed using Equation of 1 this section:

$$E = Esg + (Hg / Hb)(Esg - Eg) \quad \text{(Eq. 1)}$$

Where:

E = emissions rate of NO_x from the duct burner, ng/J (lb/million Btu) heat input

Esg = combined effluent emissions rate, in ng/J (lb/million Btu) heat input using appropriate F-Factor as described in Method 19

Hg = heat input rate to the combustion turbine, in Joules/hour (million Btu/hour)

Hb = heat input rate to the duct burner, in Joules/hour (million Btu/hour)

Eg = emissions rate from the combustion turbine, in ng/J (lb/million Btu) heat input calculated using appropriate F-Factor as described in Method 19

(ii) Method 7E of appendix A of this part shall be used to determine the NO_x concentrations. Method 3A or 3B of appendix A of this part shall be used to determine oxygen concentration.

(iii) The owner or operator shall identify and demonstrate to the Administrator's satisfaction suitable methods to determine the average hourly heat input rate to the combustion turbine and the average hourly heat input rate to the affected duct burner.

(iv) Compliance with the emissions limits under Sec. 60.44b (a)(4) or Sec. 60.44b(l) is determined by the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests; or

(2) The owner or operator of an affected facility may elect to determine compliance on a 30-day rolling average basis by using the continuous emission monitoring system specified under Sec. 60.48b for measuring NO_x and oxygen and meet the requirements of Sec. 60.48b. The sampling site shall be located at the outlet from the steam generating unit. The NO_x emissions rate at the outlet from the steam generating unit shall constitute the NO_x emissions rate from the duct burner of the combined cycle system.

(g) The owner or operator of an affected facility described in Sec. 60.44b(j) or Sec. 60.44b(k) shall demonstrate the maximum heat input capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. The owner or operator of an affected facility shall determine the maximum heat input capacity using the heat loss method described in sections 5 and 7.3 of the ASME Power Test Codes 4.1 (see IBR Sec. 60.17(h)). This demonstration of maximum heat input capacity shall be made during the initial performance test for affected facilities that meet the criteria of Sec. 60.44b(j). It shall be made within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of each facility, for affected facilities meeting the criteria of Sec. 60.44b(k). Subsequent demonstrations may be required by the Administrator at any other time. If this demonstration indicates that the maximum heat input capacity of the affected facility is less than that stated by the manufacturer of the affected facility, the maximum heat input capacity determined during this demonstration shall be used to determine the capacity utilization rate for the affected facility. Otherwise, the maximum heat input capacity provided by the manufacturer is used.

(h) The owner or operator of an affected facility described in Sec. 60.44b(j) that has a heat input capacity greater than 73 MW (250 million Btu/hour) shall:

(1) Conduct an initial performance test as required under Sec. 60.8 over a minimum of 24 consecutive steam generating unit operating hours at maximum heat input capacity to demonstrate compliance with the nitrogen oxides emission standards under Sec. 60.44b using Method 7, 7A, 7E, or other approved reference methods; and

(2) Conduct subsequent performance tests once per calendar year or every 400 hours of operation (whichever comes first) to demonstrate compliance with the nitrogen oxides emission standards under Sec. 60.44b over a minimum of 3 consecutive steam generating unit operating hours at maximum heat input capacity using Method 7, 7A, 7E, or other approved reference methods.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51820, 51825, Dec. 18, 1989; 55 FR 18876, May 7, 1990; 65 FR 61752, Oct. 17, 2000; 66 FR 18553, Apr. 10, 2001]

Sec. 60.47b Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (b) and (f) of this section, the owner or operator of an affected facility

subject to the sulfur dioxide standards under Sec. 60.42b shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) for measuring sulfur dioxide concentrations and either oxygen (O_2) or carbon dioxide (CO_2) concentrations and shall record the output of the systems. The sulfur dioxide and either oxygen or carbon dioxide concentrations shall both be monitored at the inlet and outlet of the sulfur dioxide control device.

(b) As an alternative to operating CEMS as required under paragraph (a) of this section, an owner or operator may elect to determine the average sulfur dioxide emissions and percent reduction by:

(1) Collecting coal or oil samples in an as-fired condition at the inlet to the steam generating unit and analyzing them for sulfur and heat content according to Method 19. Method 19 provides procedures for converting these measurements into the format to be used in calculating the average sulfur dioxide input rate, or

(2) Measuring sulfur dioxide according to Method 6B at the inlet or outlet to the sulfur dioxide control system. An initial stratification test is required to verify the adequacy of the Method 6B sampling location. The stratification test shall consist of three paired runs of a suitable sulfur dioxide and carbon dioxide measurement train operated at the candidate location and a second similar train operated according to the procedures in section 3.2 and the applicable procedures in section 7 of Performance Specification 2. Method 6B, Method 6A, or a combination of Methods 6 and 3 or 3B or Methods 6C and 3A are suitable measurement techniques. If Method 6B is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent.

(3) A daily sulfur dioxide emission rate, E_D, shall be determined using the procedure described in Method 6A, section 7.6.2 (Equation 6A-8) and stated in ng/J (lb/million Btu) heat input.

(4) The mean 30-day emission rate is calculated using the daily measured values in ng/J (lb/million Btu) for 30 successive steam generating unit operating days using equation 19-20 of Method 19.

(c) The owner or operator of an affected facility shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator or the reference methods and procedures as described in paragraph (b) of this section.

(d) The 1-hour average sulfur dioxide emission rates measured by the CEMS required by paragraph (a) of this section and required under Sec. 60.13(h) is expressed in ng/J or lb/million Btu heat input and is used to calculate the average emission rates under Sec. 60.42b. Each 1-hour average sulfur dioxide emission rate must be based on more than 30 minutes of steam generating unit operation and include at least 2 data points with each representing a 15-minute period. Hourly sulfur dioxide emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(e) The procedures under Sec. 60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 (appendix B).

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 (appendix F).

(3) For affected facilities combusting coal or oil, alone or in combination with other fuels, the span value of the sulfur dioxide CEMS at the inlet to the sulfur dioxide control device is 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the fuel combusted, and the span value of the CEMS at the outlet to the sulfur dioxide control device is 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the fuel combusted.

(f) The owner or operator of an affected facility that combusts very low sulfur oil is not subject to the emission monitoring requirements of this section if the owner or operator obtains fuel receipts as described in Sec. 60.49b(r).

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51820, Dec. 18, 1989; 55 FR 5212, Feb. 14, 1990; 55 FR 18876, May 7, 1990]

Sec. 60.48b Emission monitoring for particulate matter and nitrogen oxides.

(a) The owner or operator of an affected facility subject to the opacity standard under Sec. 60.43b shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.

(b) Except as provided under paragraphs (g), (h), and (i) of this section, the owner or operator of an affected facility shall comply with either paragraphs (b)(1) or (b)(2) of this section.

(1) Install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere; or

(2) If the owner or operator has installed a nitrogen oxides emission rate continuous emission monitoring system (CEMS) to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of this section, except that the owner or operator shall also meet the requirements of Sec. 60.49b. Data reported to meet the requirements of Sec. 60.49b shall not include data substituted using the missing data procedures in **subpart** D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.

(c) The continuous monitoring systems required under paragraph (b) of this section shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(d) The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by paragraph (b) of this section and required under Sec. 60.13(h) shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates under Sec. 60.44b. The 1-hour averages shall be calculated using the data points required under Sec. 60.13(b). At least 2 data points must be used to calculate each 1-hour average.

(e) The procedures under Sec. 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

(1) For affected facilities combusting coal, wood or municipal-type solid waste, the span value for a continuous monitoring system for measuring opacity shall be between 60 and 80 percent.

(2) For affected facilities combusting coal, oil, or natural gas, the span value for nitrogen oxides is determined as follows:

Fuel	Span values for nitrogen oxides (PPM)
Natural gas	500
Oil	500
Coal	1,000
Mixtures	500(x+y)+1,000z

where:

x is the fraction of total heat input derived from natural gas,

y is the fraction of total heat input derived from oil, and

z is the fraction of total heat input derived from coal.

(3) All span values computed under paragraph (e)(2) of this section for combusting mixtures of regulated fuels are rounded to the nearest 500 ppm.

(f) When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

(g) The owner or operator of an affected facility that has a heat input capacity of 73 MW (250 million Btu/hour) or less, and which has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, or any mixture of these fuels, greater than 10 percent (0.10) shall:

(1) Comply with the provisions of paragraphs (b), (c), (d), (e)(2), (e)(3), and (f) of this section, or

(2) Monitor steam generating unit operating conditions and predict nitrogen oxides emission rates as specified in a plan submitted pursuant to Sec. 60.49b(c).

(h) The owner or operator of a duct burner, as described in Sec. 60.41b, which is subject to the NO_X standards of Sec. 60.44b(a)(4) or Sec. 60.44b(l) is not required to install or operate a continuous emissions monitoring system to measure NO_X emissions.

(i) The owner or operator of an affected facility described in Sec. 60.44b(j) or Sec. 60.44b(k) is not required to install or operate a continuous monitoring system for measuring nitrogen oxides emissions.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51825, Dec. 18, 1989; 63 FR 49455, Sept. 16, 1998; 66 FR 18553, Apr. 10, 2001]

Sec. 60.49b Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by Sec. 60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility,

(2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under Secs. 60.42b(d)(1), 60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), 60.44b(c), (d), (e), (i), (j), (k), 60.45b(d), (g), 60.46b(h), or 60.48b(i),

(3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired, and,

(4) Notification that an emerging technology will be used for controlling emissions of sulfur dioxide. The Administrator will examine the description of the emerging technology and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of Sec. 60.42b(a) unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the sulfur dioxide, particulate matter, and/or nitrogen oxides emission limits under Secs. 60.42b, 60.43b, and 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B. The owner or operator of each affected facility described in Sec. 60.44b(j) or Sec. 60.44b(k) shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility.

(c) The owner or operator of each affected facility subject to the nitrogen oxides standard of Sec. 60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions under the provisions of Sec. 60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored under Sec. 60.48b(g)(2) and the records to be maintained under Sec. 60.49b(j). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. The plan shall:

(1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and nitrogen oxides emission rates (i.e., ng/J or lbs/million Btu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas oxygen level);

(2) Include the data and information that the owner or operator used to identify the relationship between nitrogen oxides emission rates and these operating conditions;

(3) Identify how these operating conditions, including steam generating unit load, will be monitored under Sec. 60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under Sec. 60.49b(j).

If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan.

(d) The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(e) For an affected facility that combusts residual oil and meets the criteria under Secs. 60.46b(e)(4), 60.44b (j), or (k), the owner or operator shall maintain records of the nitrogen content of the residual oil combusted in the affected facility and calculate the average fuel nitrogen content for the reporting period. The nitrogen content shall be determined using ASTM Method D3431-80, Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons (IBR-see Sec. 60.17), or fuel suppliers. If residual oil blends are being combusted, fuel nitrogen specifications may be prorated based on the ratio of residual oils of different nitrogen content in the fuel blend.

(f) For facilities subject to the opacity standard under Sec. 60.43b, the owner or operator shall maintain records of opacity.

(g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the nitrogen oxides standards under Sec. 60.44b shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date.

(2) The average hourly nitrogen oxides emission rates (expressed as NO_2) (ng/J or lb/million Btu heat input) measured or predicted.

(3) The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.

(4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen

oxides emission rates are in excess of the nitrogen oxides emissions standards under Sec. 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.

(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

(9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

(h) The owner or operator of any affected facility in any category listed in paragraphs (h) (1) or (2) of this section is required to submit excess emission reports for any excess emissions which occurred during the reporting period.

(1) Any affected facility subject to the opacity standards under Sec. 60.43b(e) or to the operating parameter monitoring requirements under Sec. 60.13(i)(1).

(2) Any affected facility that is subject to the nitrogen oxides standard of Sec. 60.44b, and that

(i) Combusts natural gas, distillate oil, or residual oil with a nitrogen content of 0.3 weight percent or less, or

(ii) Has a heat input capacity of 73 MW (250 million Btu/hour) or less and is required to monitor nitrogen oxides emissions on a continuous basis under Sec. 60.48b(g)(1) or steam generating unit operating conditions under Sec. 60.48b(g)(2).

(3) For the purpose of Sec. 60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under Sec. 60.43b(f).

(4) For purposes of Sec. 60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average nitrogen oxides emission rate, as determined under Sec. 60.46b(e), which exceeds the applicable emission limits in Sec. 60.44b.

(i) The owner or operator of any affected facility subject to the continuous monitoring requirements for nitrogen oxides under Sec. 60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section.

(j) The owner or operator of any affected facility subject to the sulfur dioxide standards under Sec. 60.42b shall submit reports.

(k) For each affected facility subject to the compliance and performance testing requirements of Sec. 60.45b and the reporting requirement in paragraph (j) of this section, the following information shall be reported to the Administrator:

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average sulfur dioxide emission rate (ng/J or lb/million Btu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent reduction in sulfur dioxide emissions calculated during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken.

(4) Identification of the steam generating unit operating days that coal or oil was combusted and for which sulfur dioxide or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken.

(5) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and

description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

(7) Identification of times when hourly averages have been obtained based on manual sampling methods.

(8) Identification of the times when the pollutant concentration exceeded full span of the CEMS.

(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3.

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

(11) The annual capacity factor of each fired as provided under paragraph (d) of this section.

(l) For each affected facility subject to the compliance and performance testing requirements of Sec. 60.45b(d) and the reporting requirements of paragraph (j) of this section, the following information shall be reported to the Administrator:

(1) Calendar dates when the facility was in operation during the reporting period;

(2) The 24-hour average sulfur dioxide emission rate measured for each steam generating unit operating day during the reporting period that coal or oil was combusted, ending in the last 24-hour period in the quarter; reasons for noncompliance with the emission standards; and a description of corrective actions taken;

(3) Identification of the steam generating unit operating days that coal or oil was combusted for which sulfur dioxide or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and description of corrective action taken.

(4) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have

been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(5) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

(6) Identification of times when hourly averages have been obtained based on manual sampling methods.

(7) Identification of the times when the pollutant concentration exceeded full span of the CEMS.

(8) Description of any modifications to the CEMS which could affect the ability of the CEMS to comply with Performance Specification 2 or 3.

(9) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

(m) For each affected facility subject to the sulfur dioxide standards under Sec. 60.42(b) for which the minimum amount of data required under Sec. 60.47b(f) were not obtained during the reporting period, the following information is reported to the Administrator in addition to that required under paragraph (k) of this section:

(1) The number of hourly averages available for outlet emission rates and inlet emission rates.

(2) The standard deviation of hourly averages for outlet emission rates and inlet emission rates, as determined in Method 19, section 7.

(3) The lower confidence limit for the mean outlet emission rate and the upper confidence limit for the mean inlet emission rate, as calculated in Method 19, section 7.

(4) The ratio of the lower confidence limit for the mean outlet emission rate and the allowable emission rate, as determined in Method 19, section 7.

(n) If a percent removal efficiency by fuel pretreatment (i.e., % R_f) is used to determine the overall percent reduction (i.e., % R_o) under Sec. 60.45b, the owner or operator of the affected facility shall submit a signed statement with the report.

(1) Indicating what removal efficiency by fuel pretreatment (i.e., % R_f) was credited during the reporting period;

(2) Listing the quantity, heat content, and date each pre-treated fuel shipment was received during the reporting period, the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the reporting period.

(3) Documenting the transport of the fuel from the fuel pretreatment facility to the steam generating unit.

(4) Including a signed statement from the owner or operator of the fuel pretreatment facility certifying that the percent removal efficiency achieved by fuel pretreatment was determined in accordance with the provisions of Method 19 (appendix A) and listing the heat content and sulfur content of each fuel before and after fuel pretreatment.

(o) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.

(p) The owner or operator of an affected facility described in Sec. 60.44b(j) or (k) shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date,

(2) The number of hours of operation, and

(3) A record of the hourly steam load.

(q) The owner or operator of an affected facility described in Sec. 60.44b(j) or Sec. 60.44b(k) shall submit to the Administrator a report containing:

(1) The annual capacity factor over the previous 12 months;

(2) The average fuel nitrogen content during the reporting period, if residual oil was fired; and

(3) If the affected facility meets the criteria described in Sec. 60.44b(j), the results of any nitrogen oxides emission tests required during the reporting period, the hours of operation during the reporting period, and the hours of operation since the last nitrogen oxides emission test.

(r) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil under Sec. 60.42b(j)(2) shall obtain

and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in Sec. 60.41b. For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the reporting period.

(s) Facility specific nitrogen oxides standard for Cytec Industries Fortier Plant's C.AOG incinerator located in Westwego, Louisiana:

(1) Definitions.

Oxidation zone is defined as the portion of the C.AOG incinerator that extends from the inlet of the oxidizing zone combustion air to the outlet gas stack.

Reducing zone is defined as the portion of the C.AOG incinerator that extends from the burner section to the inlet of the oxidizing zone combustion air.

Total inlet air is defined as the total amount of air introduced into the C.AOG incinerator for combustion of natural gas and chemical by-product waste and is equal to the sum of the air flow into the reducing zone and the air flow into the oxidation zone.

(2) Standard for nitrogen oxides.

(i) When fossil fuel alone is combusted, the nitrogen oxides emission limit for fossil fuel in Sec. 60.44b(a) applies.

(ii) When natural gas and chemical by-product waste are simultaneously combusted, the nitrogen oxides emission limit is 289 ng/J (0.67 lb/million Btu) and a maximum of 81 percent of the total inlet air provided for combustion shall be provided to the reducing zone of the C.AOG incinerator.

(3) Emission monitoring.

(i) The percent of total inlet air provided to the reducing zone shall be determined at least every 15 minutes by measuring the air flow of all the air entering the reducing zone and the air flow of all the air entering the oxidation zone, and compliance with the percentage of total inlet air that is provided to the

reducing zone shall be determined on a 3-hour average basis.

(ii) The nitrogen oxides emission limit shall be determined by the compliance and performance test methods and procedures for nitrogen oxides in Sec. 60.46b(i).

(iii) The monitoring of the nitrogen oxides emission limit shall be performed in accordance with Sec. 60.48b.

(4) Reporting and recordkeeping requirements.

(i) The owner or operator of the C.AOG incinerator shall submit a report on any excursions from the limits required by paragraph (a)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.

(ii) The owner or operator of the C.AOG incinerator shall keep records of the monitoring required by paragraph (a)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner of operator of the C.AOG incinerator shall perform all the applicable reporting and recordkeeping requirements of this section.

(t) Facility-specific nitrogen oxides standard for Rohm and Haas Kentucky Incorporated's Boiler No. 100 located in Louisville, Kentucky:

(1) Definitions.

Air ratio control damper is defined as the part of the low nitrogen oxides burner that is adjusted to control the split of total combustion air delivered to the reducing and oxidation portions of the combustion flame.

Flue gas recirculation line is defined as the part of Boiler No. 100 that recirculates a portion of the boiler flue gas back into the combustion air.

(2) Standard for nitrogen oxides.

(i) When fossil fuel alone is combusted, the nitrogen oxides emission limit for fossil fuel in Sec. 60.44b(a) applies.

(ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the nitrogen oxides emission limit is 473 ng/J (1.1 lb/million Btu), and the air ratio control damper tee handle shall be at a minimum of 5 inches (12.7 centimeters) out of the boiler, and the flue gas recirculation line shall be operated at a minimum of 10 percent open as indicated by its valve opening position indicator.

(3) Emission monitoring for nitrogen oxides.

(i) The air ratio control damper tee handle setting and the flue gas recirculation line valve opening position indicator setting shall be recorded during each 8-hour operating shift.

(ii) The nitrogen oxides emission limit shall be determined by the compliance and performance test methods and procedures for nitrogen oxides in Sec. 60.46b.

(iii) The monitoring of the nitrogen oxides emission limit shall be performed in accordance with Sec. 60.48b.

(4) Reporting and recordkeeping requirements.

(i) The owner or operator of Boiler No. 100 shall submit a report on any excursions from the limits required by paragraph (b)(2) of this section to the Administrator with the quarterly report required by Sec. 60.49b(i).

(ii) The owner or operator of Boiler No. 100 shall keep records of the monitoring required by paragraph (b)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner of operator of Boiler No. 100 shall perform all the applicable reporting and recordkeeping requirements of Sec. 60.49b.

(u) Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.

(1) This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site") and only to the natural gas-fired boilers installed as part of the powerhouse conversion required pursuant to 40 CFR 52.2454(g).

The requirements of this paragraph shall apply, and the requirements of Secs. 60.40b through 60.49b(t) shall not apply, to the natural gas-fired boilers installed pursuant to 40 CFR 52.2454(g).

(i) The site shall equip the natural gas-fired boilers with low nitrogen oxide (NO_X) technology.

(ii) The site shall install, calibrate, maintain, and operate a continuous monitoring and recording system for measuring NO_X emissions discharged to the atmosphere and opacity using a continuous emissions monitoring system or a predictive emissions monitoring system.

(iii) Within 180 days of the completion of the powerhouse conversion, as required by 40 CFR 52.2454, the site shall perform a stack test to quantify criteria pollutant emissions.

(2) [Reserved]

(v) The owner or operator of an affected facility may submit electronic quarterly reports for SO_2 and/or NO_X and/or opacity in lieu of submitting the written reports required under paragraphs (h), (i), (j), (k) or (l) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this **subpart** was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

(w) The reporting period for the reports required under this **subpart** is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51820, 51825, Dec. 18, 1989; 60 FR 28062, May 30, 1995; 61 FR 14031, Mar. 29, 1996; 62 FR 52641, Oct. 8, 1997; 63 FR 49455, Sept. 16, 1998; 64 FR 7464, Feb. 12, 1999; 65 FR 13243, Mar. 13, 2000]

Subpart Kb -- Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

Source: 52 FR 11429, Apr. 8, 1987, unless otherwise noted.

§60.110b - Applicability and designation of affected facility.

(a) Except as provided in paragraphs (b), (c), and (d) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 40 cubic meters (m^3) that is used to store volatile organic liquids (VOLs) for which construction, reconstruction, or modification is commenced after July 23, 1984.

(b) Except as specified in paragraphs (a) and (b) of §60.116b, storage vessels with design capacity less than 75 m^3 are exempt from the General Provisions (part 60, subpart A) and from the provisions of this subpart.

(c) Except as specified in paragraphs (a) and (b) of §60.116b, vessels either with a capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure less than 3.5 kPa or with a capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa are exempt from the General Provisions (part 60, subpart A) and from the provisions of this subpart.

(d) This subpart does not apply to the following:

(1) Vessels at coke oven by-product plants.

(2) Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.

(3) Vessels permanently attached to mobile vehicles such as trucks, railcars, barges, or ships.

(4) Vessels with a design capacity less than or equal to 1,589.874 m^3 used for petroleum or condensate stored, processed, or treated prior to custody transfer.

(5) Vessels located at bulk gasoline plants.

(6) Storage vessels located at gasoline service stations.

(7) Vessels used to store beverage alcohol.

(e) *Alternative means of compliance*

(1) Option to comply with part 65. Owners or operators may choose to comply with 40 CFR part 65, subpart C, to satisfy the requirements of §§60.112b through 60.117b for storage vessels that are subject to this subpart that meet the specifications in paragraphs (e)(1)(i) and (ii) of this section. When choosing to comply with 40 CFR part 65, subpart C, the monitoring requirements of §60.116b(c), (e), (f)(1), and (g) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(i) A storage vessel with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa; or

(ii) A storage vessel with a design capacity greater than 75 m^3 but less than 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa.

(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C, must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of storage vessels complying with 40 CFR part 65, subpart C, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR Part 65, subpart C, must comply with 40 CFR part 65, subpart A.

(3) *Internal floating roof report.* If an owner or operator installs an internal floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.43. This report shall be an attachment to the notification required by 40 CFR 65.5(b).

(4) *External floating roof report.* If an owner or operator installs an external floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.44. This

report shall be an attachment to the notification required by 40 CFR 65.5(b).

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 78275, Dec. 14, 2000]

§60.111b - Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this subpart as follows:

(a) *Bulk gasoline plant* means any gasoline distribution facility that has a gasoline throughput less than or equal to 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal requirement or Federal, State or local law, and discoverable by the Administrator and any other person.

(b) *Condensate* means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

(c) *Custody transfer* means the transfer of produced petroleum and/or condensate, after processing and/or treatment in the producing operations, from storage vessels or automatic transfer facilities to pipelines or any other forms of transportation.

(d) *Fill* means the introduction of VOL into a storage vessel but not necessarily to complete capacity.

(e) *Gasoline service station* means any site where gasoline is dispensed to motor vehicle fuel tanks from stationary storage tanks.

(f) *Maximum true vapor pressure* means the equilibrium partial pressure exerted by the stored VOL at the temperature equal to the highest calendar-month average of the VOL storage temperature for VOLs stored above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for VOLs stored at the ambient temperature, as determined:

(1) In accordance with methods described in American Petroleum institute Bulletin 2517, Evaporation Loss From External Floating Roof Tanks, (incorporated by reference -- see §60.17); or

(2) As obtained from standard reference texts; or

(3) As determined by ASTM D2879-83, 96, or 97 (incorporated by reference -- see §60.17);

(4) Any other method approved by the Administrator.

(g) *Reid vapor pressure* means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquefied petroleum gases, as determined by ASTM D323-82 or 94 (incorporated by reference -- see §60.17).

(h) *Petroleum* means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

(i) *Petroleum liquids* means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery.

(j) *Storage vessel* means each tank, reservoir, or container used for the storage of volatile organic liquids but does not include:

(1) Frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors; or

(2) Subsurface caverns or porous rock reservoirs.

(k) *Volatile organic liquid (VOL)* means any organic liquid which can emit volatile organic compounds into the atmosphere except those VOLs that emit only those compounds which the Administrator has determined do not contribute appreciably to the formation of ozone. These compounds are identified in EPA statements on ozone abatement policy for SIP revisions (42 FR 35314, 44 FR 32042, 45 FR 32424, and 45 FR 48941).

(l) *Waste* means any liquid resulting from industrial, commercial, mining or agricultural operations, or from community activities that is discarded or is being accumulated, stored, or physically, chemically, or biologically treated prior to being discarded or recycled.

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 61756, Oct. 17, 2000]

§60.112b - Standard for volatile organic compounds (VOC).

(a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 containing a VOL that, as

stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:

(1) A fixed roof in combination with an internal floating roof meeting the following specifications:

(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

(ii) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(iii) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

(vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(2) An external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications:

(i) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above

the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in §60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(B) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in §60.113b(b)(4).

(ii) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(iii) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(3) A closed vent system and control device meeting the following specifications:

(i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, §60.485(b).

(ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (§60.18) of the General Provisions.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in §60.114b of this subpart.

(b) The owner or operator of each storage vessel with a design capacity greater than or equal to 75 m^3 which contains a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 76.6 kPa shall equip each storage vessel with one of the following:

(1) A closed vent system and control device as specified in §60.112b(a)(3).

(2) A system equivalent to that described in paragraph (b)(1) as provided in §60.114b of this subpart.

(c) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.* This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site").

(1) For any storage vessel that otherwise would be subject to the control technology requirements of paragraphs (a) or (b) of this section, the site shall have the option of either complying directly with the requirements of this subpart, or reducing the site-wide total criteria pollutant emissions cap (total emissions cap) in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the total emissions cap in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this subpart for such storage vessel.

(2) For any storage vessel at the site not subject to the requirements of 40 CFR 60.112b (a) or (b), the

requirements of 40 CFR 60.116b (b) and (c) and the General Provisions (subpart A of this part) shall not apply.

[52 FR 11429, Apr. 8, 1987, as amended at 62 FR 52641, Oct. 8, 1997]

§60.113b - Testing and procedures.

The owner or operator of each storage vessel as specified in §60.112b(a) shall meet the requirements of paragraph (a), (b), or (c) of this section. The applicable paragraph for a particular storage vessel depends on the control equipment installed to meet the requirements of §60.112b.

(a) After installing the control equipment required to meet §60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:

(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(3) For vessels equipped with a double-seal system as specified in §60.112b(a)(1)(ii)(B):

(i) Visually inspect the vessel as specified in paragraph (a)(4) of this section at least every 5 years; or

(ii) Visually inspect the vessel as specified in paragraph (a)(2) of this section.

(4) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of this section.

(5) Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(b) After installing the control equipment required to meet §60.112b(a)(2) (external floating roof), the owner or operator shall:

(1) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency.

(i) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.

(ii) Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.

(iii) If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of this section.

(2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

(i) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

(ii) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

(iii) The total surface area of each gap described in paragraph (b)(2)(ii) of this section shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (b)(4) of this section.

(4) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4) (i) and (ii) of this section:

(i) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 Cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

(A) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.

(B) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(ii) The secondary seal is to meet the following requirements:

(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of this section.

(B) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

(C) There are to be no holes, tears, or other openings in the seal or seal fabric.

(iii) If a failure that is detected during inspections required in paragraph (b)(1) of §60.113b(b) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(b)(4). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(5) Notify the Administrator 30 days in advance of any gap measurements required by paragraph (b)(1) of this section to afford the Administrator the opportunity to have an observer present.

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

(i) If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.

(ii) For all the inspections required by paragraph (b)(6) of this section, the owner or operator shall notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(c) The owner or operator of each source that is equipped with a closed vent system and control device as required in §60.112b (a)(3) or (b)(2) (other than a flare) is exempt from §60.8 of the General Provisions and shall meet the following requirements.

(1) Submit for approval by the Administrator as an attachment to the notification required by §60.7(a)(1) or, if the facility is exempt from §60.7(a)(1), as an attachment to the notification

required by §60.7(a)(2), an operating plan containing the information listed below.

(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(ii) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

(d) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in §60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, §60.18 (e) and (f).

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989]

§60.114b - Alternative means of emission limitation.

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112b, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative means for purposes of compliance with that requirement.

(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.

(c) Any person seeking permission under this section shall submit to the Administrator a written application including:

(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.

(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

(d) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §60.112b.

§60.115b - Reporting and recordkeeping requirements.

The owner or operator of each storage vessel as specified in §60.112b(a) shall keep records and furnish reports as required by paragraphs (a), (b), or (c) of this section depending upon the control equipment installed to meet the requirements of §60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least 2 years. The record required by (c)(1) will be kept for the life of the control equipment.

(a) After installing control equipment in accordance with §60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). This report shall

be an attachment to the notification required by §60.7(a)(3).

(2) Keep a record of each inspection performed as required by §60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

(3) If any of the conditions described in §60.113b(a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

(4) After each inspection required by §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in §60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of §61.112b(a)(1) or §60.113b(a)(3) and list each repair made.

(b) After installing control equipment in accordance with §61.112b(a)(2) (external floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by §60.7(a)(3).

(2) Within 60 days of performing the seal gap measurements required by §60.113b(b)(1), furnish the Administrator with a report that contains:

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

(iii) The calculations described in §60.113b (b)(2) and (b)(3).

(3) Keep a record of each gap measurement performed as required by §60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

(iii) The calculations described in §60.113b (b)(2) and (b)(3).

(4) After each seal gap measurement that detects gaps exceeding the limitations specified by §60.113b(b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) of this section and the date the vessel was emptied or the repairs made and date of repair.

(c) After installing control equipment in accordance with §60.112b (a)(3) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall keep the following records.

(1) A copy of the operating plan.

(2) A record of the measured values of the parameters monitored in accordance with §60.113b(c)(2).

(d) After installing a closed vent system and flare to comply with §60.112b, the owner or operator shall meet the following requirements.

(1) A report containing the measurements required by §60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator as required by §60.8 of the General Provisions. This report shall be submitted within 6 months of the initial start-up date.

(2) Records shall be kept of all periods of operation during which the flare pilot flame is absent.

(3) Semiannual reports of all periods recorded under §60.115b(d)(2) in which the pilot flame was absent shall be furnished to the Administrator.

§60.116b - Monitoring of operations.

(a) The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years.

The record required by paragraph (b) of this section will be kept for the life of the source.

(b) The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 75 m^3 is subject to no provision of this subpart other than those required by this paragraph.

(c) Except as provided in paragraphs (f) and (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

(d) Except as provided in paragraph (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

(e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

(1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used

to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference -- see §60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

(3) For other liquids, the vapor pressure:

(i) May be obtained from standard reference texts, or

(ii) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference -- see §60.17); or

(iii) Measured by an appropriate method approved by the Administrator; or

(iv) Calculated by an appropriate method approved by the Administrator.

(f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

(1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.

(2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

(i) ASTM D2879-83, 96, or 97 (incorporated by reference -- see §60.17); or

(ii) ASTM D323-82 or 94 (incorporated by reference -- see §60.17); or

(iii) As measured by an appropriate method as approved by the Administrator.

(g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specification of §60.112b or with emissions reductions equipment as specified in 40 CFR 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (c) and (d) of this section.

[52 FR 11429, Apr. 8, 1987, as amended at 65 FR 61756, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000]

§60.117b - Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: §§60.111b(f)(4), 60.114b, 60.116b(e)(3)(iii), 60.116b(e)(3)(iv), and 60.116b(f)(2)(iii).

[52 FR 11429, Apr. 8, 1987, as amended at 52 FR 22780, June 16, 1987]

40 CFR 60 Subpart DD--Standards of Performance for Grain Elevators

Source: 43 FR 34347, Aug. 3, 1978, unless otherwise noted.

Sec. 60.300 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under Sec. 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after August 3, 1978, is subject to the requirements of this part.

[43 FR 34347, Aug. 3, 1978, as amended at 52 FR 42434, Nov. 5, 1988]

Sec. 60.301 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) Grain means corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.

(b) Grain elevator means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded.

(c) Grain terminal elevator means any grain elevator which has a permanent storage capacity of more than 88,100 m^3 (ca. 2.5 million U.S. bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

(d) Permanent storage capacity means grain storage capacity which is inside a building, bin, or silo.

(e) Railcar means railroad hopper car or boxcar.

(f) Grain storage elevator means any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity of 35,200 m^3 (ca. 1 million bushels).

(g) Process emission means the particulate matter which is collected by a capture system.

(h) Fugitive emission means the particulate matter which is not collected by a capture system and is released directly into the atmosphere from an affected facility at a grain elevator.

(i) Capture system means the equipment such as sheds, hoods, ducts, fans, dampers, etc. used to collect particulate matter generated by an affected facility at a grain elevator.

(j) Grain unloading station means that portion of a grain elevator where the grain is transferred from a truck, railcar, barge, or ship to a receiving hopper.

(k) Grain loading station means that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge, or ship.

(l) Grain handling operations include bucket elevators or legs (excluding legs used to unload barges or ships), scale hoppers and surge bins (garners), turn heads, scalpers,

cleaners, trippers, and the headhouse and other such structures.

(m) Column dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two perforated metal sheets.

(n) Rack dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in a cascading flow around rows of baffles (racks).

(o) Unloading leg means a device which includes a bucket-type elevator which is used to remove grain from a barge or ship.

[43 FR 34347, Aug. 3, 1978, as amended at 65 FR 61759, Oct. 17, 2000]

Sec. 60.302 Standard for particulate matter.

(a) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any gases which exhibit greater than 0 percent opacity from any:

(1) Column dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch).

(2) Rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh.

(b) On and after the date on which the performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

(1) Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

(2) Exhibits greater than 0 percent opacity.

(c) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:

(1) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

(2) Any grain handling operation which exhibits greater than 0 percent opacity.

(3) Any truck loading station which exhibits greater than 10 percent opacity.

(4) Any barge or ship loading station which exhibits greater than 20 percent opacity.

(d) The owner or operator of any barge or ship unloading station shall operate as follows:

(1) The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.

(2) The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft^3/bu).

(3) Rather than meet the requirements of paragraphs (d)(1) and (2) of this section the owner or operator may use other methods of emission control if it is demonstrated to the Administrator's satisfaction that they would reduce emissions of particulate matter to the same level or less.

Sec. 60.303 Test methods and procedures.

(a) In conducting the performance tests required in Sec. 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in Sec. 60.8(b). Acceptable alternative methods and procedures are given in paragraph (c) of this section.

(b) The owner or operator shall determine compliance with the particulate matter standards in Sec. 60.302 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

(2) Method 2 shall be used to determine the ventilation volumetric flow rate.

(3) Method 9 and the procedures in Sec. 60.11 shall be used to determine opacity.

(c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For Method 5, Method 17 may be used.

[54 FR 6674, Feb. 14, 1989]

Sec. 60.304 Modifications.

(a) The factor 6.5 shall be used in place of "annual asset guidelines repair allowance percentage," to determine whether a capital expenditure as defined by Sec. 60.2 has been made to an existing facility.

(b) The following physical changes or changes in the method of operation shall not by themselves be considered a modification of any existing facility:

(1) The addition of gravity loadout spouts to existing grain storage or grain transfer bins.

(2) The installation of automatic grain weighing scales.

(3) Replacement of motor and drive units driving existing grain handling equipment.

(4) The installation of permanent storage capacity with no increase in hourly grain handling capacity.

10.3 Attachment 3 - Applicable State of Illinois Rules and Regulations, Title 35: Environmental Protection, Subtitle B: Air Pollution, Chapter I: Pollution Control Board, Subchapter c: Emission Standards and Limitations for Stationary Sources

PART 212
VISIBLE AND PARTICULATE MATTER EMISSIONS

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AUTHORITY: Implementing Section 10 and authorized by Section 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/10, 27 and 28.5].

SOURCE: Adopted as Chapter 2: Air Pollution, Rules 202 and 203: Visual and Particulate Emission Standards and Limitations, R71 23, 4 PCB 191, filed and effective April 14, 1972; amended in R77-15, 32 PCB 403, at 3 Ill. Reg. 5, p. 798, effective February 3, 1979; amended in R78-10, 35 PCB 347, at 3 Ill. Reg. 39, p. 184, effective September 28, 1979; amended in R78-11, 35 PCB 505, at 3 Ill. Reg. 45, p. 100, effective October 26, 1979; amended in R78-9, 38 PCB 411, at 4 Ill. Reg. 24, p. 514, effective June 4, 1980; amended in R79-11, 43 PCB 481, at 5 Ill. Reg. 11590,

effective October 19, 1981; codified at 7 Ill. Reg. 13591; amended in R82-1 (Docket A) at 10 Ill. Reg. 12637, effective July 9, 1986; amended in R85-33 at 10 Ill. Reg. 18030, effective October 7, 1986; amended in R84-48 at 11 Ill. Reg. 691, effective December 18, 1986; amended in R84-42 at 11 Ill. Reg. 1410, effective December 30, 1986; amended in R82-1 (Docket B) at 12 Ill. Reg. 12492, effective July 13, 1988; amended in R91-6 at 15 Ill. Reg. 15708, effective October 4, 1991; amended in R89-7(B) at 15 Ill. Reg. 17710, effective November 26, 1991; amended in R91-22 at 16 Ill. Reg. 7880, effective May 11, 1992; amended in R91-35 at 16 Ill. Reg. 8204, effective May 15, 1992; amended in R93-30 at 18 Ill. Reg. 11587, effective July 11, 1994; amended in R96-5 at 20 Ill. Reg.7605, effective May 22, 1996).

BOARD NOTE: This Part implements the Illinois Environmental Protection Act as of July 1, 1994.

PART 212
VISIBLE AND PARTICULATE MATTER EMISSIONS

SUBPART A: GENERAL

Section 212.100 Scope and Organization

a) This Part contains standards and limitations for visible and particulate matter emissions from stationary emission units.

b) Permits for sources subject to this Part may be required pursuant to 35 Ill. Adm. Code 201.

c) Notwithstanding the provisions of this Part, the air quality standards contained in 35 Ill. Adm. Code 243 may not be violated.

d) This Part includes Subparts which are arranged as follows:

1) Subpart A: General Provisions;

2) Subpart B: Visible Emissions;

3) Subparts C-J: Incinerators and Fuel Combustion Emission Units;

4) Subparts K-M: Fugitive and Process Emission Units;

5) Subparts N-T: Site specific and industry specific rules; and

6) Subpart U: Additional control measures.

e) Rules have been grouped for the convenience of the public; the scope of each is determined by its language and history.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.107 Measurement Method for Visible Emissions

For both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Subpart, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Subpart shall not apply to Section 212.301 of this Part.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.108 Measurement Methods for PM-10 Emissions and Condensible PM-10 Emissions

a) Emissions of PM-10 shall be measured by any of the following methods at the option of the owner or operator of an emission unit.

   1) Method 201, 40 CFR part 51, Appendix M, incorporated by reference in Section 212.113 of this Subpart.

   2) Method 201A, 40 CFR part 51, Appendix M, incorporated by reference in Section 212.113 of this Subpart.

   3) Method 5, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Subpart, provided that all particulate matter measured by Method 5 shall be considered to be PM-10.

b) Emissions of condensible PM-10 shall be measured by Method 202, 40 CFR part 51, Appendix M, incorporated by reference in Section 212.113 of this Subpart.

c) The volumetric flow rate and gas velocity for stack test methods shall be determined in accordance with Methods 1, 1A, 2, 2A, 2C, 2D, 3, or 4, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Subpart.

d) Upon a written notification by the Illinois Environmental Protection Agency (Agency), the owner or operator of a PM-10 emission unit subject to this Section shall conduct the applicable testing for PM-10 emissions, condensible PM-10 emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Agency within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Agency.

e) A person planning to conduct testing for PM-10 or condensible PM-10 emissions to demonstrate compliance shall give written notice to the Agency of that intent. Such notification shall be given at least thirty (30) days prior to initiation of the test unless a shorter pre-notification is agreed to by the Agency. Such notification shall state the specific test methods from subsection (a) of this Section that will be used.

f) The owner or operator of an emission unit subject to this Section shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

g) This Section shall not affect the authority of the United States Environmental Protection Agency (USEPA) under Section 114 of the Clean Air Act (CAA) (42 U.S.C. § 7414 (1990)).

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.109 Measurement Methods for Opacity

Except as otherwise provided in this Part, and except for the methods of data reduction when applied to Sections 212.122 and 212.123 of this Part, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, incorporated by reference in Section 212.113 of this Subpart, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

PART 212
VISIBLE AND PARTICULATE MATTER EMISSIONS
SUBPART A: GENERAL

Section 212.110 Measurement Methods For Particulate Matter

a) Measurement of particulate matter emissions from stationary emission units subject to this Part shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E, as incorporated by reference in Section 212.113 of this Subpart.

b) The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A,

Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4, incorporated by reference in Section 212.113 of this Subpart.

c) Upon a written notification by the Agency, the owner or operator of a particulate matter emission unit subject to this Part shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Agency within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Agency.

d) A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Agency of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Agency. Such notification shall state the specific test methods from this Section that will be used.

e) The owner or operator of an emission unit subject to this Part shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

f) This Section shall not affect the authority of the USEPA under Section 114 of the CAA.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.111 Abbreviations and Units

a. The following abbreviations are used in this Part:

Btu	British thermal units (60 1/4°F)
dscf	dry standard cubic foot
ft	foot
ft^2	square feet
fpm	feet per minute
gal	gallon
gr	grains
gr/scf	grains per standard cubic foot
gr/dscf	grains per dry standard cubic foot
hr	hour
J	Joule
kg	kilogram
kg/MW-hr	kilograms per megawatt-hour
km	kilometer
L	liter
lbs	pounds
lbs/hr	pounds per hour
lbs/mmBtu	pounds per million Btu

m	meter
m^2	square meters
mph	miles per hour
mg	milligram
mg/scm	milligrams per standard cubic meter
mg/dscm	milligrams per dry standard cubic meter
mg/L	milligrams per liter
Mg	megagram, metric ton or tonne
mi	mile
mmBtu	million British thermal units
mmBtu/hr	million British thermal units per hour
MW	megawatt; one million watts
MW-hr	megawatt-hour
ng	nanogram; one billionth of a gram
ng/J	nanograms per Joule
scf	standard cubic foot
scfm	standard cubic feet per minute
scm	standard cubic meter
T	short ton (2000 lbs)
yd^2	square yards

b. The following conversion factors have been used in this Part:

English	Metric
2.205 lb	1 kg
1 T	0.907 Mg
1 lb/T	0.500 kg/Mg
mmBtu/hr	0.293 MW
1 lb/mmBtu	1.548 kg/MW-hr or 430 ng/J
1 mi	1.61 km
1 gr	64.81 mg
1 gr/scf	2289 mg/scm
1 ft^2	0.0929 m^2
1 ft	0.3048 m
1 gal	3.785 L

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.112 Definitions

The definitions of 35 Ill. Adm. Code 201 and 211 apply to this Part.

(Source: Added and codified at 7 Ill. Reg. 13591)

Section 212.113 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

a) 40 CFR part 60, Appendix A (1991):

1) Method 1: Sample and Velocity Traverses for Stationary Sources;

2) Method 1A: Sample and Velocity Traverses for Stationary Source with Small Stacks or Ducts;

3) Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S pilot tube);

4) Method 2A: Direct Measurement of Gas Volume Through Pipes and Small Ducts;

5) Method 2C: Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pilot Tube);

6) Method 2D: Measurement of Gas Volumetric Flow Rates in Small Pipes and Ducts;

7) Method 3: Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight;

8) Method 4: Determination of Moisture Content in Stack Gases;

9) Method 5: Determination of Particulate Emissions From Stationary Sources;

10) Method 5A: Determination of Particulate Emissions From the Asphalt Processing and Asphalt Roofing Industry;

11) Method 5D: Determination of Particulate Matter Emissions From Positive Pressure Fabric Filters;

12) Method 5E: Determination of Particulate Emissions From the Wool Fiberglass Insulation Manufacturing Industry;

13) Method 9: Visual Determination of the Opacity of Emissions from Stationary Sources;

14) Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares.

b) 40 CFR part 51 Appendix M (1994):

1) Method 201: Determination of PM-10 Emissions;

2) Method 201A: Determination of PM-10 Emissions (Constant Sampling Rate Procedure);

3) Method 202: Determination of Condensible Particulate Emissions from Stationary Sources.

c) 40 CFR 60.672(b), (c), (d) and (e) (1991).

d) 40 CFR 60.675(c) and (d) (1991).

e) ASAE Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers, American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085.

f) U.S. Sieve Series, ASTM-E11, American Society of Testing Materials, 1916 Race Street, Philadelphia, PA 19103.

g) Standard Methods for the Examination of Water and Wastewater, Section 209C, "Total Filterable Residue Dried at 103 - 105° C," 15th Edition, 1980, American Public Health Association, 1015 Fifteenth Street, N.W., Washington, D.C. 20005.

h) "Guideline on the Identification and Use of Air Quality Data Affected by Exceptional Events," U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards Monitoring and Data Analysis Division, Research Triangle Park, N.C. 27711, EPA-450/4-86-007 July 1986.

i) "Guideline on Air Quality Models (Revised)," U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, EPA-450/2-78-027R July 1986.

j) 40 CFR 50, Appendix K (1992), "Interpretation of the National Ambient Air Quality Standard for Particulate Matter".

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

PART 212
VISIBLE AND PARTICULATE MATTER EMISSIONS
SUBPART B: VISIBLE EMISSIONS

Section 212.121 Opacity Standards (Repealed)

(Source: Repealed at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.122 Visible Emissions Limitations for Certain Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

a) No person shall cause or allow the emission of smoke or other particulate matter into the atmosphere from any fuel combustion emission unit for which construction or

modification commenced on or after April 14, 1972, with actual heat input greater than 73.2 MW (250 mmBtu/hr), having an opacity greater than 20 percent.

b) The emissions of smoke or other particulate matter from any such emission unit may have an opacity greater than 20 percent but not greater than 40 percent for a period or periods aggregating 3 minutes in any 60 minute period, providing that such opaque emission permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person and provided further that such opaque emissions permitted from each such fuel combustion emission unit shall be limited to 3 times in any 24 hour period.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.123 Visible Emissions Limitations for All Other Emission Units

a) No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to Section 212.122 of this Subpart.

b) The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.124 Exceptions

a) Sections 212.122 and 212.123 of this Subpart shall apply during times of startup, malfunction and breakdown except as provided in the operating permit granted in accordance with 35 Ill. Adm. Code 201.

b) Sections 212.122 and 212.123 of this Subpart shall not apply to emissions of water or water vapor from an emission unit.

c) An emission unit which has obtained an adjusted opacity standard pursuant to Section 212.126 of this Subpart shall be subject to that standard rather than the limitations of Section 212.122 or 212.123 of this Subpart.

d) Compliance with the particulate regulations of this Part shall constitute a defense.

1) For all emission units which are not subject to Chapters 111 or 112 of the CAA and Sections 212.201, 212.202, 212.203 or 212.204 of this Part but which are subject to Sections 212.122 or 212.123 of this Subpart: the opacity limitations of Sections 212.122 and 212.123 of this Subpart shall not apply if it is shown that the emission unit was, at the time of such emission, in compliance with the applicable particulate emissions limitations of Subparts D through T of this Part.

2) For all emission units which are not subject to Chapters 111 or 112 of the CAA but which are subject to Sections 212.201, 212.202, 212.203 or 212.204 of this Part:

A) An exceedance of the limitations of Section 212.122 or 212.123 of this Subpart shall constitute a violation of the applicable particulate limitations of Subparts D through T of this Part. It shall be a defense to a violation of the applicable particulate limitations if, during a subsequent performance test conducted within a reasonable time not to exceed 60 days, under the same operating conditions for the unit and the control devices, and in accordance with Method 5, 40 CFR part 60, incorporated by reference in Section 212.113 of this Part, the owner or operator shows that the emission unit is in compliance with the particulate emission limitations.

B) It shall be a defense to an exceedance of the opacity limit if, during a subsequent performance test conducted within a reasonable time not to exceed 60 days, under the same operating conditions of the emission unit and the control devices, and in accordance with Method 5, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, the owner or operator shows that the emission unit is in compliance with the allowable particulate emissions limitation while, simultaneously, having visible

emissions equal to or greater than the opacity exceedance as originally observed.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.125 Determination of Violations

Violations of Sections 212.122 and 212.123 of this Subpart shall be determined:

a) By visual observations conducted in accordance with Section 212.109 of this Part; or

b) By the use of a calibrated smoke evaluation device approved by the Agency as specified in Subpart J of 35 Ill. Adm. Code 201; or

c) By the use of a smoke monitor located in the stack and approved by the Agency as specified in Subpart J or L of 35 Ill. Adm. Code 201.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.126 Adjusted Opacity Standards Procedures

a) Pursuant to Section 28.1 of the Environmental Protection Act (Act) [415 ILCS 5/28.1], and in accordance with 35 Ill. Adm. Code 106, Subpart E, provisions for adjusted standards for visible emissions for emission units subject to Sections 212.201, 212.202, 212.203, or 212.204 of this Part shall be granted by the Board to the extent consistent with federal law based upon a demonstration by such owner or operator that the results of a performance test conducted pursuant to this Section, Section 212.110 of this Part, and Methods 5 and 9 of 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, show that the emission unit meets the applicable particulate emission limitations at the same time that the visible emissions exceed the otherwise applicable standards of Sections 212.121 through 212.125 of this Subpart. Such adjusted opacity limitations:

1) Shall be specified as a condition in operating permits issued pursuant to 35 Ill. Adm. Code 201 and Section 39.5 of the Act;

2) Shall substitute for that limitation otherwise applicable;

3) Shall not allow an opacity greater than 60 percent at any time; and

4) Shall allow opacity for one six-minute averaging period in any 60 minute period to exceed the adjusted opacity standard.

b) For the purpose of establishing an adjusted opacity standard, any owner or operator of an emission unit which meets the requirements of subsection (a) of this Section, may request the Agency to determine the average opacity of the emissions from the emission unit during any performance tests conducted pursuant to Section 212.110 of this Part and Methods 5 and 9 of 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part. The Agency shall refuse to accept the results of emissions tests if not conducted pursuant to this Section.

c) Any request for the determination of the average opacity of emissions shall be made in writing, shall include the time and place of the performance test and test specifications and procedures, and shall be submitted to the Agency at least thirty (30) days before the proposed test date.

d) The Agency will advise the owner or operator of an emission unit which has requested an opacity determination of any deficiencies in the proposed test specifications and procedures as expeditiously as practicable but no later than ten (10) days prior to the proposed test date so as to minimize any disruption of the proposed testing schedule.

e) The owner or operator shall allow Agency personnel to be present during the performance test.

f) The method for determining an adjusted opacity standard is as follows:

1) A minimum of 60 consecutive minutes of opacity readings obtained in accordance with Test Method 9, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, shall be taken during each sampling run. Therefore, for each performance test (which normally consists of three sampling runs), a total of three sets of opacity readings totaling three hours or more shall be obtained. Concurrently, the particulate emissions data from three sampling runs obtained in accordance with Test Method 5, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, shall also be obtained.

2) After the results of the performance tests are received from the emission unit, the status of compliance with the applicable particulate emissions limitation shall be determined by the Agency. In

accordance with Test Method 5, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, the average of the results of the three sampling runs must be less than the allowable particulate emission rate in order for the emission unit to be considered in compliance. If compliance is demonstrated, then only those test runs with results which are less than the allowable particulate emission rate shall be considered as acceptable test runs for the purpose of establishing an adjusted opacity standard.

3) The opacity readings for each acceptable sampling run shall be divided into sets of 24 consecutive readings. The six (6) minute average opacity for each set shall be determined by dividing the sum of the 24 readings within each set by 24.

4) The second highest six (6) minute average opacity obtained in subsection (f)(3) of this Section shall be selected as the adjusted opacity standard.

g) The owner or operator shall submit a written report of the results of the performance test to the Agency at least thirty (30) days prior to filing a petition for an adjusted standard with the Board.

h) If, upon review of such owner's or operator's written report of the results of the performance tests, the Agency determines that the emission unit is in compliance with all applicable emission limitations for which the performance tests were conducted, but fails to comply with the requirements of Section 212.122 or 212.123 of this Subpart, the Agency shall notify the owner or operator as expeditiously as practicable, but no later than twenty (20) days after receiving the written report of any deficiencies in the results of the performance tests.

i) The owner or operator may petition the Board for an adjusted visible emission standard pursuant to 35 Ill. Adm. Code 106.Subpart E. In addition to the requirements of 35 Ill. Adm. Code 106.Subpart E, the petition shall include the following information:

1) A description of the business or activity of the petitioner, including its location and relevant pollution control equipment;

2) The quantity and type of materials discharged from the emission unit or control equipment for which the adjusted standard is requested;

3) A copy of any correspondence between the petitioner and the Agency regarding the performance tests which form the basis of the adjusted standard request;

4) A copy of the written report submitted to the Agency pursuant to subsection (g) of this Section;

5) A statement that the performance tests were conducted in accordance with this Section and the conditions and procedures accepted by the Agency pursuant to Section 212.110 of this Part;

6) A statement regarding the specific limitation requested; and

7) A statement as to whether the Agency has sent notice of deficiencies in the results of the performance test pursuant to subsection (h) of this Section and a copy of said notice.

j) In order to qualify for an adjusted standard the owner or operator must justify as follows:

1) That the performance tests were conducted in accordance with Test Methods 5 and 9, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, and the conditions and procedures accepted by the Agency pursuant to Section 212.110 of this Part;

2) That the emission unit and associated air pollution control equipment were operated and maintained in a manner so as to minimize the opacity of the emissions during the performance tests; and

3) That the proposed adjusted opacity standard was determined in accordance with subsection (f) of this Section.

k) Nothing in this Section shall prevent any person from initiating or participating in a rulemaking, variance, or permit appeal proceeding before the Board.

PART 212
VISIBLE AND PARTICULATE MATTER EMISSIONS
SUBPART E: PARTICULATE MATTER EMISSIONS FROM FUEL COMBUSTION EMISSION UNITS

Section 212.201 Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972, Using Solid Fuel Exclusively Located in the Chicago Area

No person shall cause or allow the emission of particulate matter into the atmosphere from any fuel combustion emission unit for which

construction or modification commenced prior to April 14, 1972, using solid fuel exclusively, located in the Chicago major metropolitan area, to exceed 0.15 kg of particulate matter per MW-hr of actual heat input in any one hour period (0.10 lbs/mmBtu/hr) except as provided in Section 212.203 of this Subpart.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.202 Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972, Using Solid Fuel Exclusively Located Outside the Chicago Area

No person shall cause or allow the emission of particulate matter into the atmosphere from any fuel combustion emission unit for which construction or modification commenced prior to April 14, 1972, using solid fuel exclusively, which is located outside the Chicago major metropolitan area, to exceed the limitations specified in the table below in any one hour period except as provided in Section 212.203 of this Subpart.

METRIC UNITS

H (Range) MW Megawatts	S Kg/MW
Less than or equal to 2.93	1.55
Greater than 2.93 but smaller than 73.2	$3.33\ H^{-0.715}$
Greater than or equal to 73.2	0.155

ENGLISH UNITS

H (Range) mmBtu/hr	S lbs/mmBtu
Less than or equal to 10	1.0
Greater than 10 but smaller than 250	$5.18H^{-0.715}$
Greater than or equal to 250	0.1

Where:

S = Allowable emission standard in lbs/mmBtu/hr or kg/MW of actual heat input, and

H = Actual heat input in mmBtu/hr or MW-hr

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.203 Controlled Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972, Using Solid Fuel Exclusively

Notwithstanding Sections 212.201 and 212.202 of this Subpart, any fuel combustion emission unit for which construction or modification commenced prior to April 14, 1972, using solid fuel exclusively may, in any one hour period, emit up to, but not exceed 0.31 kg/MW-hr (0.20 lbs/mmBtu), if as of April 14, 1972, any one of the following conditions was met:

a) The emission unit had an hourly emission rate based on original design or equipment performance test conditions, whichever is stricter, which was less than 0.31 kg/MW-hr (0.20 lbs/mmBtu) of actual heat input, and the emission control of such emission unit is not allowed to degrade more than 0.077 kg/MW-hr (0.05 lbs/mmBtu) from such original design or acceptance performance test conditions; or

b) The emission unit was in full compliance with the terms and conditions of a variance granted by the Pollution Control Board (Board) sufficient to achieve an hourly emission rate less than 0.31 kg/MW-hr (0.20 lbs/mmBtu), and construction has commenced on equipment or modifications prescribed under that program; and emission control of such emission unit is not allowed to degrade more than 0.077 kg/MW-hr (0.05 lbs/mmBtu) from original design or equipment performance test conditions, whichever is stricter; or

c) The emission unit had an hourly emission rate based on original design or equipment performance test conditions, whichever is stricter, which was less than 0.31 kg/MW-hr (0.20 lbs/mmBtu) of actual heat input, and the emission control of such emission unit is not allowed to degrade more than 0.077 kg/MW-hr (0.05 lbs/mmBtu) from that rate demonstrated by the most recent stack test, submitted to and accepted by the Agency prior to April 1, 1985, provided that:

    1) Owners and operators of emission units subject to this subsection shall have applied for a new operating permit by January 9, 1987; and

    2) The application for a new operating permit shall have included a demonstration that the proposed emission rate, if greater than the emission rate allowed by subsections (a) or (b) of this Section, will not under any foreseeable operating conditions and potential meteorological conditions cause or contribute to a violation of any applicable primary or secondary ambient air quality standard for

particulate matter, or violate any applicable prevention of significant deterioration (PSD) increment, or violate 35 Ill. Adm. Code 201.141.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.204 Emission Units For Which Construction or Modification Commenced On or After April 14, 1972,Using Solid Fuel Exclusively

No person shall cause or allow the emission of particulate matter into the atmosphere from any fuel combustion emission unit for which construction or modification commenced on or after April 14, 1972, using solid fuel exclusively to exceed 0.15 kg of particulate matter per MW-hr of actual heat input (0.1 lbs/mmBtu) in any one hour period unless Section 212.202, 212.203, or 212.205 applies.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.205 Coal-fired Industrial Boilers For Which Construction or Modification Commenced Prior to April 14, 1972, Equipped with Flue Gas Desulfurization Systems

Notwithstanding Sections 212.201 through 212.204 of this Subpart, no person shall cause or allow the emission of particulate matter into the atmosphere from coal-fired industrial boilers equipped with flue gas desulfurization systems for which construction or modification commenced prior to April 14, 1972, to exceed 0.39 kg of particulate matter per MW-hr of actual heat input in any one-hour period (0.25 lbs/mmBtu). Nothing in this rule shall be construed to prevent compliance with applicable regulations promulgated by the USEPA under Section 111 of the CAA as amended. *The provisions of Section 111 of the Clean Air Act relating to standards of performance for new stationary sources ... Are applicable in this state and are enforceable under the act* [415 ILCS 5/9.1(b)].

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.206 Emission Units Using Liquid Fuel Exclusively

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.207 Emission Units Using More Than One Type of Fuel

a) No person, while simultaneously burning more than one type of fuel in a fuel combustion emission unit, shall cause or

allow the emission of particulate matter into the atmosphere in any one hour period in excess of the following equation:

E = AS + BL

Where:

E = Allowable emission rate;

A = Solid fuel particulate emission standard which is applicable;

B = Constant determined from the table in subsection (b);

S =Actual heat input from solid fuel;

L =Actual heat input from liquid fuel.

b) The metric and English units to be used in the equation of subsection (a) of this Section are as follows:

Parameter	Metric	English
E	kg/hr	lbs/hr
A	kg/MW-hr	lbs/mmBtu
B	0.155	0.10
S	MW	mmBtu/hr
L	MW	mmBtu/hr

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.208 Aggregation of Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

Section 212.207 of this Subpart may be applied to the aggregate of all fuel combustion emission units for which construction or modification commenced prior to April 14, 1972, vented to a common stack provided that after January 26, 1972:

a) Ductwork has not been modified so as to interconnect such existing fuel combustion emission units;

b) The actual heat input to any such existing fuel combustion emission units is not increased; and

c) No new fuel combustion emission unit is added to reduce the degree of control of emissions of particulate matter required by this Subpart.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

Section 212.209 Village of Winnetka Generating Station (Repealed)

(Source: Repealed at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.210 Emissions Limitations for Certain Fuel Combustion Emission Units Located in the Vicinity of Granite City

a) No person shall cause or allow emissions of PM-10 into the atmosphere to exceed 12.9 ng/J (0.03 lbs/mmBtu) of heat input from fuels other than natural gas during any one hour period from any industrial fuel combustion emission units, other than in an integrated iron and steel plant, located in the vicinity of Granite City, which area is defined in Section 212.324(a)(1)(C) of this Subpart.

b) Emission units shall comply with the emissions limitations of this Section by May 11, 1993, or upon initial start-up, whichever occurs later.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

PART 212
VISIBLE AND PARTICULATE MATTER EMISSIONS

SUBPART L: PARTICULATE MATTER EMISSIONS FROM PROCESS EMISSION UNITS

Section 212.321 Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

a) No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

b) Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

Where:

P = Process weight rate; and
E = Allowable emission rate; and,

i) Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.214	2.54
B	0.534	0.534

ii) For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	11.42	24.8
B	0.16	0.16

c) Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

PART 212
VISIBLE AND PARTICULATE MATTER EMISSIONS

SUBPART L: PARTICULATE MATTER EMISSIONS FROM PROCESS EMISSION UNITS

Section 212.322 Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

10.4.1 Process Emission Units for Which Construction or Modification Commenced Prior to After April 14, 1972

a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].

b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

$$E = C + A(P)^B$$

Where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.2	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

PART 212
VISIBLE AND PARTICULATE MATTER EMISSIONS
SUBPART S: AGRICULTURE

Section 212.461 Grain Handling and Drying in General

a) Sections 212.302(a), 212.321, and 212.322 of this Part shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

b) Housekeeping Practices. All grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

1) Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

2) Cleaning and Maintenance.

A) Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B) Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C) The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

3) Dump Pit.

A) Aspiration equipment shall be maintained and operated.

B) Dust control devices shall be maintained and operated.

4) Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

5) Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

6) Housekeeping Check List. Housekeeping check lists to be developed by the Agency shall be completed by the manager and maintained on the premises for inspection by Agency personnel.

c) Exemptions. Any grain-handling operation for which construction or modification commenced prior to June 30, 1975, having a grain through-put of not more than 2 million bushels per year and located inside a major population area and any grain-handling operation or grain-drying operation for which construction or modification commenced prior to June 30, 1975, located outside of a major population area which is required to apply for a permit pursuant to Sections 212.462 and 212.463 of this Subpart, respectively, shall receive such permit notwithstanding the control requirements of those respective rules provided said operation can demonstrate

that the following conditions exist upon application for, or renewal of, an operating permit:

1) The requirements of subsection (b) of this Section are being met; and

2) No certified investigation is on file with the Agency indicating that there is an alleged violation prior to issuance of the permit.

A) If a certified investigation is on file with the Agency indicating an alleged violation, any applicant may obtain an exemption for certain operations if said applicant can prove to the Agency that those parts of his operation for which he seeks exemption are not the probable cause of the alleged violation.

B) Applicants requesting an exemption in accordance with the provisions of subsection (c)(2)(A) of this Section may be granted an operating permit for a limited time, not to exceed twelve (12) months in duration, if an objection is on file with the Agency on which a certified investigation has not been made prior to issuance of the permit.

C) An applicant may consider denial of an exemption under this rule as a refusal by the Agency to issue a permit. This shall entitle the applicant to appeal the Agency's decision to the Board pursuant to Section 40 of the Act [415 ILCS 5/40].

d) Loss of Exemption. Any grain-handling operation or grain-drying operation for which construction or modification commenced prior to June 30, 1975, that has received an operating permit pursuant to the provisions of subsection (c) of this Section shall apply for an operating and/or construction permit pursuant to 35 Ill. Adm. Code 201 within sixty (60) days after receipt of written notice from the Agency that a certified investigation is on file with the Agency indicating that there is an alleged violation against the operation. The construction permit application shall include a compliance plan and project completion schedule showing the grain-handling operation's program or grain-drying operation's program for complying with the standards and limitations of Section 212.462 or 212.463 of this Subpart as the case may be, within a reasonable time after the date on which notice of a certified investigation indicating alleged pollution was received by said operation; provided, however, any such operation shall not be required to reduce emissions from those parts of the operation that the applicant can prove

to the Agency are not the probable cause of the pollution alleged in the certified investigation.

1) The written notice of loss of exemption is not a final action of the Agency appeal able to the Board.

2) Denial of a permit requested pursuant to this subsection is a final action appeal able to the Board under Section 40 of the Act [415 ILCS 5/40].

e) Circumvention. It shall be a violation of this regulation for any person or persons to attempt to circumvent the requirements of this regulation by establishing a pattern of ownership or source development which, except for such pattern of ownership or source development, would otherwise require application of Section 212.462 or 212.463 of this Subpart.

f) Standard on Appeal to Board. In ruling on any appeal of a permit denial under subsection (c) or (d) of this Section, the Board shall not order the permit to be issued by the Agency unless the applicant who has appealed the permit denial has proved to the Board that the grain-handling operation or grain-drying operation which is the subject of the denied application is not injurious to human, plant or animal life, to health, or to property, and does not unreasonably interfere with the enjoyment of life or property.

g) Alternate Control of Particulate Emissions.

1) Grain-handling or grain-drying operations, which were in numerical compliance with Section 212.322 of this Part, as of April 14, 1972, and continue to be in compliance with Section 212.322 of this Part need not comply with the provisions under this Subpart, except the housekeeping practices in this subsection and subsection (b) of this Section.

2) Grain-handling or grain-drying operations, which were not in numerical compliance with Section 212.322 of this Part, as of April 14, 1972, but which came into compliance with Section 212.321 of this Part prior to April 14, 1972, and continue to be in compliance with Section 212.321 of this Part need not comply with the provisions under this Subpart, except the housekeeping practices in this subsection and in subsection (b) of this Section.

3) Proof of compliance with said rule shall be made by stack sampling and/or material balance results obtained from actual testing of the subject emission unit or process and be submitted at the time of an application for, or renewal of, an operating permit.

h) Severability. If any provision of these rules and regulations is adjudged invalid, such invalidity shall not affect the validity of this 35 Ill. Adm. Code, Subtitle B, Chapter I as a whole or of any Part, Subpart, sentence or clause thereof not adjudged invalid.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.462 Grain Handling Operations

Unless otherwise exempted pursuant to Section 212.461(c) or (d) of this Subpart, or allowed to use alternate control according to Section 212.461(g) of this Subpart, existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code 201, and shall demonstrate compliance with the following:

a) Cleaning and Separating Operations.

1) Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

2) For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

3) For grain-handling sources having a grain through-put exceeding 2 million bushels per year and located within a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 98 percent by weight prior to release into the atmosphere.

b) Major Dump-Pit Area.

1) Induced Draft.

A) Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective

grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

Where:

V = Face velocity; and
Q = Induced draft volume in scfm; and
A = Effective grate area in ft^2; and

B) The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight; and

C) The induced draft air stream for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 98 percent by weight; and

D) Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

2) Any equivalent method, technique, system or combination thereof adequate to achieve, at a minimum, a particulate matter emission reduction equal to the reduction which could be achieved by compliance with subsection (b)(1) of this Section. (Board Note: Pursuant to Section 9 of the Act,

certain country grain elevators are exempt from subsection (b) of this Section.)

c) Internal Transferring Area.

1) Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

2) Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

3) Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 98 percent by weight prior to release into the atmosphere.

d) Load-Out Area.

1) Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

2) Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

3) Watercraft Loading.

A) Particulate matter emissions generated during loading for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be captured in an induced draft air stream, which shall be ducted through air pollution control equipment that has a rated and actual particulate matter removal efficiency of not less than 90 percent

by weight prior to release into the atmosphere.

B) Particulate matter emissions generated during loading for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be captured in an induced draft air stream, which shall be ducted through air pollution control equipment that has a rated and actual particulate removal efficiency of not less than 98 percent by weight prior to release into the atmosphere; except for the portion of grain loaded by trimming machines for which particulate matter emission reductions, at a minimum, shall equal the reduction achieved by compliance with subsection (d)(3)(A) of this Section.

e) New and Modified Grain-Handling Operations. Grain-handling operations for which construction or modification commenced on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code 201, and shall comply with the control equipment requirements of this Section, except for grain-handling operations for which construction or modification commenced on or after June 30, 1975, which will handle an annual grain through-put of less than 300,000 bushels; provided, however, that for the purpose of this Subpart, an increase in the annual grain through-put, without physical alterations or additions to the grain-handling operation, shall not be considered a modification unless such increase exceeds 30 percent of the annual grain through-put on which the operation's original construction and/or operating permit was granted. If the grain-handling operation has been operating lawfully without a permit, its annual grain through-put shall be determined as set forth in the definition of the term "annual grain through-put."

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.463 Grain Drying Operations

Unless otherwise exempted pursuant to Section 212.461(c) or (d) of this Subpart or allowed to use alternate control according to Section 212.461(g) of this Subpart, grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers, incorporated by reference in Section 212.113 of this Part) shall be operated

in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code 201, and shall comply with the following:

a) Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

b) Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

1) All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

2) All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

c) Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to subsection (b) of this Section.

d) New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code 201, and shall comply with the control equipment requirements of this Section, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.464 Sources in Certain Areas

a) Applicability. Notwithstanding Section 212.461 of this Subpart, this Section shall apply to those sources located in the Lake Calumet area as defined in Section 212.324(a)(1)(B) of this Part.

b) Emission Limitations

1) No person shall cause or allow the emission of PM-10, other than that of fugitive particulate matter, into the atmosphere to exceed 22.9 mg/scm (0.01 gr/scf) during any one hour period from any process emission unit engaged in the drying, storing, mixing or treating of grain except for column grain dryers; in addition, no person shall cause or allow visible emissions of PM-10 other than fugitive particulate matter from grain conveying, transferring, loading, or unloading operations including garners, scales and cleaners.

2) No person shall cause or allow the emission of fugitive particulate matter into the atmosphere from barges and other watercraft, truck or rail loading or unloading systems to exceed the limits specified in Section 212.123 of this Part.

3) Column grain dryers shall not be eligible for the exemptions as provided in Section 212.461(g) of this Part.

c) Exceptions. The mass emission limits contained in subsection (b) of this Section shall apply to those sources with no visible emissions other than that of fugitive particulate matter; however, if a stack test is performed, this subsection is not a defense to a finding of a violation of the mass emission limits contained in subsection (b) of this Section.

d) Maintenance, Repair, and Recordkeeping. The requirements of Section 212.324 (f) and (g) of this Part shall also apply to this Section.

e) Compliance Date. Emission units shall comply with the emission limitations and recordkeeping and reporting requirements of this Section May 11, 1993, or upon initial start-up, whichever occurs later.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 214
SULFUR LIMITATIONS

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Appendix A Rule into Section Table
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Appendix C Method used to Determine Average Actual Stack Height and Effective Height of Effluent Release
Appendix D Past Compliance Dates

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, Ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 204: Sulfur Emission Standards and Limitations, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R74-2 and R75-5, 32 PCB 295, at 3 Ill. Reg. 5, p. 777, effective February 3, 1979; amended in R74-2, R75-5, 38 PCB 129, at 4 Ill. Reg. 28, p. 417, effective June 26, 1980; amended in R78-17, 40 PCB 291, at 5 Ill. Reg. 1892, effective February 17, 1981; amended in R77-15, 44 PCB 267, at 6 Ill. Reg. 2146, effective January 28, 1982; amended and renumbered in R80-22(A), at 7 Ill. Reg. 4219, effective March 28, 1983; codified 7 Ill. Reg. 13597; amended in R80-22(B), at 8 Ill. Reg. 6172, effective April 24, 1984; amended in R84-28, at 10 Ill. Reg. 9806, effective May 20, 1986; amended in R86-31, at 12 Ill. Reg. 17387, effective October 14, 1988; amended in R86-30, at 12 Ill. Reg. 20778, effective December 5, 1988; amended in R87-31 at 15 Ill. Reg. 1017, effective January 15, 1991.

PART 214
SULFUR LIMITATIONS
SUBPART A: GENERAL PROVISIONS

Section 214.100 Scope and Organization

a) This Part sets standards and limitations for emission of sulfur from stationary sources.

b) Permit for sources subject to this Part may be required pursuant to 35 Ill. Adm. Code 201.

c) Notwithstanding the provisions of this Part, the air quality standards contained in 35 Ill. Adm. Code 243 may not be violated.

d) This Part is divided into Subparts which are grouped as follows:

1) Subpart A: General Provisions

2) Subparts B - J: Fuel Combustion Emission Sources and Incinerators

3) Subparts K - M: Process Emission Sources

4) Subparts N - End: Industry and site specific rules.

e) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history.

Section 214.101 Measurement Methods

A determination of non-compliance based on any subsection of this Section shall not be refuted by evidence of compliance with any other subsection.

a) Sulfur Dioxide Measurement. Measurement of sulfur dioxide emissions from stationary sources shall be made according to an applicable method specified in 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C, incorporated by reference in Section 214.104(a), or by measurement procedures established pursuant to 40 CFR 60.8(b), incorporated by reference in Section 214.104(b). (Ill. Rev. Stat. 1989, Ch. 111 1/2, par. 1010.)

b) Sulfuric Acid Mist and Sulfur Trioxide Measurement. Measurement of sulfuric acid mist and sulfur trioxide shall be according to the barium-thorin titration method specified in 40 CFR 60, Appendix A, Method 8, incorporated by reference in Section 214.104(a).

c) Solid Fuel Averaging Measurement Daily Analysis Method. This subsection applies to sources at plants with total solid fuel-fired heat input capacity exceeding 439.5 MW (1500 million Btu/hr). If daily fuel analysis is used to demonstrate compliance or non-compliance with Sections 214.122, 214.141, 214.142(a) 214.162, 214.186 and 214.421, the sulfur dioxide emission rate to be compared to the emission limit shall be considered to be the result of averaging daily samples taken over any consecutive two-month period provided no more than 5 percent of the sample values are greater than 20 percent above the sample average. If samples from a source cannot meet this statistical criterion, each individual daily sample analysis for such source shall be compared to the source's emission limit to determine compliance. The specific ASTM procedures, incorporated by reference in Section 214.104(c), shall be used for solid fuel sampling, sulfur, and heating value determinations.

d) Weekly Analysis Method. This subsection applies to sources at plants with total solid fuel-fired heat input capacity exceeding 146.5 MW (500 million Btu/hr) but not exceeding 439.5 MW (1500 million Btu/hr). These plants shall demonstrate compliance or non-compliance with Sections 214.122, 214.141, 214.142(a), 214.162, 214.186 and 214.421 by either an analysis of calendar weekly composites of daily fuel samples or by compliance with subsection (c) above, at the option of the plant. The specific ASTM procedures incorporated by reference in Section 214.104(c), shall be used for sulfur and heating value determinations.

e) Monthly Analysis Method. This subsection applies to sources at plants with total fuel-fired heat input capacity exceeding 14.65 MW (50 millions Btu/hr) but not exceeding 146.5 MW (500 million Btu/hr). These plants shall demonstrate compliance or non-compliance with Sections 214.122, 214.141, 214.142(a), 214.162, 214.186 and 214.421 by either an analysis of calendar monthly composites of daily fuel samples or by compliance with subsection (c) above, at the option of the plant. ASTM procedures incorporated by reference in Section 214.104(c), shall be used for sulfur and heating value determinations.

f) Small Source Alternative Method. This subsection applies to sources at plants with total solid fuel-fired heat input capacity not exceeding 14.65 MW (50 million Btu/hr). Compliance or non-compliance with Sections 214.122, 214.141, 214.142(a), 214.162, 214.186 and 214.421 shall be demonstrated by a calendar month average sulfur dioxide emission rate.

g) Exemptions. Subsections (c) through (f) shall not apply to sources controlling sulfur dioxide emissions by flue gas desulfurization equipment or by sorbent injection.

h) Hydrogen Sulfide Measurement. For purposes of determining compliance with Section 214.382(c), the concentration of hydrogen sulfide in petroleum refinery fuel gas shall be measured using the Tutwiler Procedure specified in 40 CFR 60.648, incorporated by reference in Section 214.104(d).

(Source: Amended at 15 Ill. Reg. 1017, effective January 15, 1991)

Section 214.102 Abbreviations and Units

a) The following abbreviations are used in this Part:

Btu	British thermal units (60°F)
ft	foot
gr	grains
J	Joule

kg	kilogram
kg/MW-hr	kilograms per megawatt-hour
km	kilometer
lbs	pounds
lbs/mmBtu	pounds per million Btu
m	meter
mg	milligram
Mg	megagram, metric ton or tonne
mi	mile
mmBtu	million British thermal units
mmBtu/hr	million British thermal units per hour
MW	megawatt; one million watts
MW-hr	megawatt-hour
ng	nanogram; one billionth of a gram by volume
ng/J	nanograms per Joule
ppm	parts per million
scf	standard cubic foot
scm	standard cubic meter
T	English ton

b) The following conversion factors have been used in this Part:

English	Metric
2.205 lb.	1 kg
1 T	0.907 Mg
1 lb/T	0.500 kg/Mg
mmBtu/hr	0.293 MW
1 lb/mmBtu	1.548 kg/MW-hr
1 mi	1.61 km
1 gr/scf	2289 mg/scm

(Source: Amended at 12 Ill. Reg. 20778, effective December 5, 1988)

Section 214.103 Definitions

The definitions of 35 Ill. Adm. Code 201 and 211 apply to this Part.

Section 214.104 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions:

a) 40 CFR 60, Appendix A (1989):

1) Method 6: Determination of Sulfur Dioxide Emissions From Stationary Sources;

2) Method 6A: Determination of Sulfur Dioxide, Moisture, and Carbon Dioxide Emissions From Fossil Fuel Combustion Sources;

3) Method 6B: Determination of Sulfur Dioxide and Carbon Dioxide Daily Average Emissions From Fossil Fuel Combustion Sources;

4) Method 6C: Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure);

5) Method 8: Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions From Stationary Sources.

b) 40 CFR 60.8(b) (1989), Performance Tests.

c) American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103:

1) For solid fuel sampling:
ASTM D-2234 (1989)
ASTM D-2013 (1986)

2) For sulfur determinations:
ASTM D-3177 (1984)
ASTM D-2622 (1987)
ASTM D-3180 (1984)
ASTM D-4239 (1985)

3) For heating value determinations:
ASTM D-2015 (1985)
ASTM D-3286 (1985)

d) Tutwiler Procedure for hydrogen sulfide, 40 CFR 60.648 (1989).

(Source: Amended at 15 Ill. Reg. 1017, effective January 15, 1991)

PART 214
SULFUR LIMITATIONS
SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

Section 214.120 Scope

Subparts B through F contain general rules for sulfur emissions from fuel combustion emission sources. These may be modified by industry and site specific rules in Subparts N et seq.

Section 214.121 Large Sources

This section applies to new fuel combustion emission sources with actual heat input greater than 73.2 MW (250 mmBtu/hr).

a) Solid Fuel Burned Exclusively. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion emission source greater than 73.2 MW (250 mmBtu/hr), burning solid fuel exclusively, to exceed 1.86 kg of sulfur dioxide per MW-hr of actual heat input (1.2 lbs/mmBtu). (Board Note: This section was invalidated in Commonwealth Edison v. PCB, 25 Ill. App. 3d 271, 62 Ill.2d 494, 43 N.E.2d 84, Ashland Chemical Corp. v. PCB, 64 Ill. App.3d 169, and Illinois State Chamber of Commerce v. PCB, 67 Ill. App.3d 839, 384 N.E.2d 922, 78 Ill.2d 1, 398 N.E.2d 9.)

b) Liquid Fuel Burned Exclusively. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion emission source greater than 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively:

1) To exceed 1.2 kg of sulfur dioxide per MW-hr of actual heat input when residual fuel oil is burned (0.8 lbs/mmBtu); and

2) To exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.122 Small Sources

This section applies to new fuel combustion emission sources with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr).

a) Solid Fuel Burned Exclusively. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning solid fuel exclusively, to exceed 2.79 kg of sulfur dioxide per MW-hr of actual heat input (1.8 lbs/mmBtu).

b) Liquid Fuel Burned Exclusively. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively:

1) To exceed 1.55 kg of sulfur dioxide per MW-hr of actual heat input when residential fuel oil is burned (0.8 lbs/mmBtu); and

2) To exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).

(Source: Amended at 4 Ill. Reg. 28, p. 417, effective June 26, 1980)

PART 214
SULFUR LIMITATIONS
SUBPART K: PROCESS EMISSION SOURCES

Section 214.300 Scope

Subpart K contains general rules for sulfur emissions from process sources. These may be modified by industry and site specific rules in Subparts N et seq.

Section 214.301 General Limitation

Except as further provided by this Part, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.302 Exception for Air Pollution Control Equipment

Section 214.301 shall not apply to processes designed to remove sulfur compounds from the flue gases of fuel combustion emission sources.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.303 Use of Sulfuric Acid

With the exception of fuel combustion emission sources and acid manufacturing, no person using sulfuric acid shall cause or allow the emission of sulfuric acid and/or sulfur trioxide from all other similar emission sources at a plant or premises to exceed:

a) 45.4 grams in any one hour period for sulfuric acid usage less than 1180 MG/yr (100 percent acid basis) (0.10 lbs/hr up to 1300 T/yr);

b) 250 grams per metric ton of acid used for sulfuric acid usage greater than or equal to 1180 Mg/yr (100 percent acid basis) (0.50 lbs/T over 1300 T/yr).

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.304 Fuel Burning Process Emission Source

The emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major

metropolitan areas shall comply with applicable Subparts B through F, except as follows: No person shall cause or allow the emissions of sulfur into the atmosphere in any one hour period from burning tea leaves as fuel to exceed 0.70 pounds of sulfur dioxide per mmBtu of actual heat input.

(Source: Added at 7 Ill. Reg. 4219, effective March 28, 1983)

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AUTHORITY: Implementing Sections 9.1 and 10 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/9.1, 10 and 27].

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 205: Organic Material Emission Standards and Limitations, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R77-3, 33 PCB 357, at 3 Ill. Reg. 18, p. 41, effective May 3, 1979; amended in R78-3 and R78-4, 35 PCB 75, at 3 Ill. Reg. 30, p. 124, effective July 28, 1979; amended in R80-5 at 7 Ill. Reg. 1244, effective January 21, 1983; codified at 7 Ill. Reg. 13601 Corrected at 7 Ill. Reg. 14575; amended in R82-14 at 8 Ill. Reg. 13254, effective July 12, 1984; amended in R83-36 at 9 Ill. Reg. 9114, effective May 30, 1985; amended in R82-14 at 9 Ill. Reg. 13960, effective August 28, 1985; amended in R85-28 at 11 Ill. Reg. 3127, effective February 3, 1987; amended in R82-14 at 11 Ill. Reg. 7296, effective April 3, 1987; amended in R85-21(A) at 11 Ill. Reg. 11770, effective June 29, 1987; recodified in R86-39 at 11 Ill. Reg. 13541; amended in R82-14 and R86-12 at 11 Ill. Reg. 16706, effective September 30, 1987; amended in R85-21(B) at 11 Ill. Reg. 19117, effective November 9, 1987; amended in R86-36, R86-39, R86-40 at 11 Ill. Reg. 20829, effective December 14, 1987; amended in R82-14 and R86-37 at 12 Ill. Reg. 815, effective December 24, 1987; amended in R86-18 at 12 Ill. Reg. 7311, effective April 8, 1988; amended in R86-10 at 12 Ill. Reg. 7650, effective April 11, 1988; amended in R88-23 at 13 Ill. Reg. 10893, effective June 27, 1989; amended in R88-30(A) at 14 Ill. Reg. 3555, effective February 27, 1990; emergency amendments in R88-30A at 14 Ill. Reg. 6421, effective April 11, 1990, for a maximum of 150 days; amended in R88-19 at 14 Ill. Reg. 7596, effective May 8, 1990; amended in R89-16(A) at 14 Ill. Reg. 9173,

effective May 23, 1990; amended in R88-30(B) at 15 Ill. Reg. 3309, effective February 15, 1991; amended in R88-14 at 15 Ill. Reg. 8018, effective May 14, 1991; amended in R91-7 at 15 Ill. Reg. 12217, effective August 19, 1991; amended in R91-10 at 15 Ill. Reg. 15595, effective October 11, 1991; amended in R89-7(B) at 15 Ill. Reg. 17687, effective November 26, 1991; amended in R91-9 at 16 Ill. Reg. 3132, effective February 18, 1992; amended in R91-24 at 16 Ill. Reg. 13555, effective August 24, 1992; amended in R91-30 at 16 Ill. Reg. 13849, effective August 24, 1992; amended in R98-15 at 22 Ill. Reg. 11427, effective June 19, 1998.

PART 215
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS

SUBPART A: GENERAL PROVISIONS

Section 215.100 Introduction

a) This Part contains standards and limitations for emissions of organic material from stationary sources located in areas other than the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County, and the Metro East area counties of Madison, Monroe, and St. Clair. Standards and limitations applying in the Chicago area are set forth in 35 Ill. Adm. Code 218. Standards and limitations applying in the Metro East area are set forth in 35 Ill. Adm. Code 219.

1) Notwithstanding any other provision of this Part, the provisions of this Part shall not apply to sources located in the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County, unless the provisions of 35 Ill. Adm. Code Part 218 applicable to such sources are voided or otherwise made ineffective pursuant to Section 218.100 of 35 Ill. Adm. Code Part 218.

2) Notwithstanding any other provision of this Part, the provisions of this Part shall not apply to sources in the Metro East area counties of Madison, Monroe and St. Clair unless the provisions of 35 Ill. Adm. Code Part 219 applicable to such sources are voided or otherwise made ineffective pursuant to Section 219.100 of 35 Ill. Adm. Code Part 219.

b) Sources subject to this Part may be subject to the following:

1) Permits required under 35 Ill. Adm. Code 201;

2) Air quality standards under 35 Ill. Adm. Code 243.

c) This Part is divided into Subparts which are grouped as follows:

1) Subpart A: General Provisions;

2) Subpart B - J: Emissions from equipment and operations in common to more than one industry;

3) Subparts K - M: Emissions from use of organic material;

4) Subpart N - end: Special rules for various industry groups.

(Source: Amended at 16 Ill. Reg. 13849, effective August 24, 1992)

Section 215.101 Clean-up and Disposal Operations

Emission of organic material released during clean-up operations and disposal shall be included with other emissions of organic material from the related emission source or air pollution control equipment in determining total emissions.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.102 Testing Methods

Volatile organic material or organic material concentrations in a stream is measured by Method 18, 40 CFR 60, Appendix A, incorporated by reference in Section 215.105, Measurement of Gaseous Organic Compounds incorporated by reference in 215.105 except as follows. ASTM D-4457, incorporated by reference in Section 215.105, may be used for halogenated organic compounds. Method 25, 25A or 25B, 40 CFR 60, Appendix A, incorporated by reference in 215.105 may be substituted for Method 18 provided the source owner or operator submits calibration data and other proof that this method provides the information in the emission units of the applicable standard. The volumetric flow rate and gas velocity is determined in accordance with Methods 1, 1A, 2, 2A, 2C, 2D, 3 and 4, 40 CFR Part 60, Appendix A, incorporated by reference in 215.105. Any other alternate test method must be approved by the Agency, which shall consider data comparing the performance of the proposed alternative to the performance of the approved test method(s). If the Agency determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test method(s), the Agency shall approve the proposed alternative.

(Source: Amended at 15 Ill. Reg. 8018, effective May 14, 1991)

Section 215.103 Abbreviations and Conversion Factors

a. The following abbreviations are used in this Part:

bbl	barrels (42 gal)
°C	degrees Celsius or centigrade
cu in	cubic inches
°F	degrees Fahrenheit
ft	foot
g	gram
g/mole	grams per mole
gal	gallon
hr	hour
in	inch
°K	degrees Kelvin
kcal	kilocalorie
kg	kilogram
kg/hr	kilograms per hour
kPa	kilopascals; one thousand newtons per square meter
l	liter
lb	pound
lbs/hr	pounds per hour
lbs/gal	pounds per gallon
m	meter
Mg	megagram, metric ton or tonne
min	minute
MJ	mega joules
mm Hg	millimeters of mercury
ml	milliliter
ppm	parts per million
ppmv	parts per million by volume
psi	pounds per square inch
psia	pounds per square inch absolute
psig	pounds per square inch gauge
scm	standard cubic meters
T	English ton

b. The following conversion factors have been used in this Part:

English	Metric
1 gal	3.785 1
1000 gal	3,785 1 or 3.785 cubic meters
1 psia	6.897 kPa (51.71 mm Hg)
2.205 lbs	1 kg
1 bbl	159.01 1
1 cu in	16.39 ml
1 lb/gal	119,800 mg/l
1T	0.907 mg

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.104 Definitions

The definitions of 35 Ill. Adm. Code 201 and 211 apply to this Part, as well as the definitions contained in this Section. Where the definition contained in this Section is more specific than that found in 35 Ill. Adm. Code 201 or 211, it shall take precedence in application of this Part.

"Furniture Coating Application Line": The combination of coating application equipment, flash-off area, spray booths, ovens, conveyors, and other equipment operated in a predetermined sequence for purpose of applying coating to wood furniture.

"In Vacuum Service:" For the purposes of Subpart Q, Sections 215.430 through 215.438 equipment which is operating at an internal pressure that is at least 5 kPa (0.73 psia) below ambient pressure.

"Opaque Stains": All stains containing pigments not classified as semi-transparent stains including stains, glazes and other opaque material to give character to wood.

"Reid vapor pressure": is the standardized measure of the vapor pressure of a liquid in pounds per square inch absolute (psia) at 100°F (37.8°C).

(Source: Amended at 22 Ill. Reg. 11427, effective June 19, 1998)

Section 215.105 Incorporation by Reference

The following materials are incorporated by reference:

a) American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103:

1) ASTM D 1644-59 Method A

2) ASTM D 1475-60

3) ASTM D 2369-81

4) ASTM D 2879-83 (Approved 1983); ASTM D 2879-86 (Approved 1986)

5) ASTM D 323-82 (Approved 1982)

6) ASTM D 86-82 (Approved 1982)

7) ASTM E 260-73 (Approved 1973), E 168 - 67 (Reapproved 1977), E 169 - 63 (Reapproved 1981), E 20 (Approved 1985)

8) ASTM D 97-66

9) ASTM D 1946-67

10) ASTM D 2382-76

11) ASTM D 2504-83

12) ASTM D 2382-83

13) ASTM D-4057-81 (Approved 1981)

14) ASTM D-4177-82 (Approved 1982)

15) ASTM D-4953-89

16) ASTM D-4457-85

b) Federal Standard 141a, Method 4082.1.

c) National Fire Codes, National Fire Protection Association, Battery March Park, Quincy, Massachusetts 02269 (1979).

d) United States Environmental Protection Agency, Washington, D.C., EPA-450/2-77-026, Appendix A.

e) United States Environmental Protection Agency, Washington, D.C., EPA-450/2-78-051 Appendix A and Appendix B (December 1978).

f) Standards Industrial Classification Manual, published by Executive Office of the President, Office of Management and Budget, Washington, D.C., 1972.

g) 40 CFR 60 (1989).

h) United States Environmental Protection Agency, Washington D.C., EPA-450/2-78-041.

i) 40 CFR 80, Appendices D, E, and F (1989).

j) Elsevier Scientific Publishing Co., New York, "The Vapor Pressure of Pure Substances" (1973), Boublik, T., V. Fried and E. Hala.

k) McGraw-Hill Book Company, "Perry's Chemical Engineer's Handbook" (1984).

l) Chemical Rubber Publishing Company, "CRC Handbook of Chemistry and Physics" (1968-87).

m) McGraw-Hill Book Company, "Lange's Handbook of Chemistry" (1985) John A. Dean, Editor.

n) United States Environmental Protection Agency, Washington D.C., "Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products", (EPA-450/2-78-029).

BOARD NOTE: The incorporations by reference listed above contain no later amendments or editions.

(Source: Amended at 15 Ill. Reg. 8018, effective May 14, 1991)

Section 215.106 Afterburners

The operation of any oil fired or natural gas fired after-burner and capture system used to comply with this Part of any section thereof is not required during the period of November 1 of any year to April 1 of the following year provided that:

a) The operation of such devices is not required for purposes of occupational safety or health, or for the control of toxic substances, odor nuisances or other regulated pollutants; and

b) Such devices are operated for the duration of any period for which an ozone advisory, alert or emergency has been declared pursuant to 35 Ill. Adm. Code 244.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.107 Determination of Applicability

a) In determining the applicability of regulations in this Part which are qualified by "when averaged over the preceding three calendar years" the "preceding three calendar years" shall mean:

1) The three years preceding the date by which compliance is required for purposes of determining initial applicability to existing sources;

2) Any consecutive three year period for purposes of determining applicability to sources not previously subject to the regulation on the date by which compliance is required.

b) Sources to which the regulation has been applicable at any time shall continue to be subject to the applicable limitations even if operations change so as to result in an average which is below that which initially made the regulation applicable to those sources' operations.

(Source: Added in R85-21 (A) at 11 Ill. Reg. 11770, effective June 29, 1987)

Section 215.108 Measurement of Vapor Pressures

a) Vapor Pressure of Volatile Organic Liquids

1) If the volatile organic liquid consists of only a single compound, the vapor pressure shall be determined by ASTM Method D 2879-86, or the vapor pressure may be obtained from a published source such as "The Vapor Pressure of Pure Substances," "Perry's Chemical Engineer's Handbook" "CRC Handbook of Chemistry and Physics," or "Lange's Handbook of Chemistry," each source incorporated by reference at Section 215.105.

2) If the volatile organic liquid is a mixture, the vapor pressure shall be determined by ASTM Method D 2879-86 or by the following equation:

$$P_{vol} = \sum_{i=1}^{n} P_i X_i$$

Where:

P_{vol} = Total vapor pressure of the mixture.

n = Number of components in the mixture.

i = Subscript denoting an individual component.

P_i = Vapor pressure of a component determined in accordance with subsection (a)(1).

X_i = Mole fraction of the component in the total mixture.

b) Vapor Pressure of Organic Material or Solvent

1) If the organic material or solvent consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879-86, or the vapor pressure may be obtained from a published source such as "The Vapor Pressure of Pure Substances," "Perry's Chemical Engineer's Handbook," "CRC Handbook of Chemistry and Physics," or "Lange's Handbook of Chemistry," each source incorporated by reference at Section 215.105.

2) If the organic material or solvent is a mixture made up of both organic material compounds and compounds which are not organic material, the vapor pressure shall be determined by the following equation:

n

$$P_{om} = \frac{\sum_{i=1}^{n} P_i X_i}{\sum_{i=1}^{n} X_i}$$

Where:

P_{om} = Total vapor pressure of the portion of the mixture which is composed of organic material.

n = Number of organic material components in the mixture.

i = Subscript denoting an individual component.

P_i = Vapor pressure of an organic material component determined in accordance with subsection (b)(1).

X_i = Mole fraction of the organic material component of the total mixture.

3) If the organic material or solvent is a mixture made up of only organic material compounds, the vapor pressure shall be determined by ASTM Method D2879-86 or by the above equation.

c) Vapor Pressure of Volatile Organic Material

1) If the volatile organic material consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879-86, or the vapor pressure may be obtained from a published source such as "The Vapor Pressure of Pure Substances," "Perry's Chemical Engineer's Handbook," "CRC Handbook of Chemistry and Physics," or "Lange's Handbook of Chemistry," each source incorporated by reference at Section 215.105.

2) If the volatile organic material is a mixture made up of both volatile organic material compounds and compounds which are not volatile organic material, the vapor pressure shall be determined by the following equation:

$$P_{vom} = \frac{\sum_{i=1}^{n} P_i X_i}{\sum_{i=1}^{n} X_i}$$

Where:

P_{vom} = Total vapor pressure of the portion of the mixture which is composed of volatile organic material.

n = Number of volatile organic material components in the mixture.

i = Subscript denoting an individual component.

P_i = Vapor pressure of a volatile organic material component determined in accordance with subsection (c)(1).

X_i = Mole fraction of the volatile organic material component of the total mixture.

3) If the volatile organic material is a mixture made up of only volatile organic material compounds, the vapor pressure shall be determined by ASTM D2879-86 or by the above equation.

(Source: Added at 15 Ill. Reg. 8018, effective May 14, 1991)

PART 215
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS
SUBPART A: GENERAL PROVISIONS

Section 215.109 Monitoring for Negligibly-Reactive Compounds

Any provision of 35 Ill. Adm. Code 211 notwithstanding, the Agency may require an owner or operator to submit monitoring or testing methods and results for any of the compounds listed at 35 Ill. Adm. Code 211.7150 as exempted from the definition of "volatile organic material" demonstrating the amount of exempted compounds in the source's emissions, as a precondition to such exemption, where direct quantification of volatile organic material emissions is not possible due to any of the following circumstances which make it necessary to quantify the exempt compound emissions in order to quantify volatile organic material emissions:

a) VOM and exempted compounds are mixed together in the same emissions;

b) There are a large number of exempted compounds in the same emissions; or

c) The chemical composition of the exempted compounds in the emissions is not known.

Board Note: Derived from the USEPA "Recommended Policy on the Control of Volatile Organic Compounds", as amended at 56 Fed. Reg. 11418, March 18, 1991, and subsequently codified as 40 CFR 51.100(s), as added at 57 Fed. Reg.

3941 (Feb. 3, 1992). See also 35 Ill. Adm. Code 211.7150 for the basic definition of "volatile organic material." USEPA is not bound by any state determination as to monitoring. 40 CFR 51.100(s)(4).

(Source: Amended at 22 Ill. Reg. 11427, effective June 19, 1998)

SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND LOADING OPERATIONS

Section 215.121 Storage Containers

No person shall cause or allow the storage of any volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3 K (70 F) or any gaseous organic material in any stationary tank, reservoir or other container of more than 151 cubic meters (40,000 gal) capacity unless such tank, reservoir or other container:

a) Is a pressure tank capable of withstanding the vapor pressure of such liquid or the pressure of the gas, so as to prevent vapor or gas loss to the atmosphere at all times; or,

b) Is designed and equipped with one of the following vapor loss control devices:

1) A floating roof which rests on the surface of the volatile organic liquid and is equipped with a closure seal or seals between the roof edge and the tank wall. Such floating roof shall not be permitted if the volatile organic liquid has a vapor pressure of 86.19 kPa (12.5 psia) or greater at 294.3° K (70°F). No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tanks, except during sampling or maintenance operations.

2) A vapor recovery system consisting of:

A) A vapor gathering system capable of collecting 85% or more of the uncontrolled volatile organic material that would be otherwise emitted to the atmosphere; and,

B) A vapor disposal system capable of processing such volatile organic material so as to prevent its emission to the atmosphere. No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tank, reservoir or other container except during sampling.

3) Other equipment or means of equal efficiency approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.122 Loading Operations

a) No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading facility having through-put of greater than 151 cubic meters per day (40,000 gal/day) into any railroad tank car, tank truck or trailer unless such loading facility is equipped with submerged loading pipes, submerged fill, or a device that is equally effective in controlling emissions and is approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.

b) No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 1 (250 gal), unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Agency according to the provisions of 35 Ill. Adm. Code 201 or unless such tank is a pressure tank as described in Section 215.121(a) or is fitted with a recovery system as described in Section 215.121(b)(2).

c) Exception: If no odor nuisance exists the limitations of this Section shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).

(Source: Amended at 14 Ill. Reg. 9173, effective May 23, 1990)

Section 215.123 Petroleum Liquid Storage Tanks

a) The requirements of subsection (b) below shall not apply to any stationary storage tank:

1) Equipped before January 1, 1979 with one of the vapor loss control devices specified in Section 215.121(b) of this Part, except Section 215.121(b)(1) of this Part;

2) With a capacity of less than 151.42 cubic meters;

3) With a capacity of less than 1,600 cubic meters (422,400 gallons) and used to store produced crude oil and condensate prior to custody transfer;

4) With a capacity of less than 1,430 cubic meters (378,000 gallons) and used to store produced oil or condensate in crude oil gathering;

5) Subject to new source performance standards for storage vessels of petroleum liquid, 40 CFR 60, incorporated by reference in Section 215.105 of this Part. *The provisions of Section 111 of the Clean Air Act...relating to standards of performance for new stationary sources...are applicable in this State and are enforceable under [The Environmental Protection Act].* (Ill. Rev. Stat., ch. 111 1/2, par. 1009.1(b)).

6) In which volatile petroleum liquid is not stored; or

7) Which is a pressure tank as described in Section 215.121(a) of this Part.

b) Subject to subsection (a) above no owner or operator of a stationary storage tank shall cause or allow the storage of any volatile pertroleum liquid in the tank unless:

1) The tank is equipped with one of the vapor loss control devices specified in Section 215.121(b) of this Part;

2) There are no visible holes, tears or other defects in the seal or any seal fabric or material of any floating roof;

3) All openings of any floating roof deck, except stub drains, are equipped with covers, lids or seals such that:

A) The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank;

B) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and

C) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;

4) Routine inspections of floating roof seals are conducted through roof hatches once every six months;

5) A complete inspection of the cover and seal of any floating roof tank is made whenever the tank is emptied for reasons other than the transfer of

petroleum liquid during the normal operation of the tank, or whenever repairs are made as a result of any semi-annual inspection or incidence of roof damage or defect; and

6) A record of the results of each inspection conducted under subsection (b)(4) or (b)(5) above is maintained.

c) Owners and operators of petroleum liquid storage tanks were required to have compliance schedules as summarized in Appendix C of this Part.

(Source: Amended at 16 Ill. Reg. 13849, effective August 24, 1992)

Section 215.124 External Floating Roofs

a) In addition to meeting the requirements of Section 215.123(b), no owner or operator of a stationary storage tank equipped with an external floating roof shall cause or allow the storage of any volatile petroleum liquid in the tank unless:

1) The tank has been fitted with a continuous secondary seal extending from the floating roof to the tank wall (rim mounted secondary seal) or any other device which controls volatile organic material emissions with an effectiveness equal to or greater than a rimmounted secondary seal;

2) Each seal closure device meets the following requirements:

A) The seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and tank wall; and

B) The accumulated area of gaps exceeding 0.32 centimeter (1/8 inch) in width between the secondary seal and the tank wall shall not exceed 21.2 square centimeters per meter of tank diameter (1.0 square inches per foot of tank diameter).

3) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers across at least 90 percent of the area of the opening;

4) Openings are equipped with projections into the tank which remain below the liquid surface at all times;

5) Inspections are conducted prior to May 1 of each year to insure compliance with subsection (a);

6) The secondary seal gap is measured prior to May 1 of each year;

7) Records of the types of volatile petroleum liquid stored, the maximum true vapor pressure of the liquid as stored, the results of the inspections and the results of the secondary seal gap measurements are maintained and available to the Agency, upon verbal or written request, at any reasonable time for a minimum of two years after the date on which the record was made.

b) Subsection (a) does not apply to any stationary storage tank equipped with an external floating roof:

1) Exempted under Section 215.123(a)(2) through 215.123(a)(6);

2) Of welded construction equipped with a metallic-type shoe seal having a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal);

3) Of welded construction equipped with a metallic-type shoe seal, a liquid-mounted foam seal, or a liquid-mounted liquid-filled-type seal, or other closure device of equivalent control efficiency approved by the Agency in which a petroleum liquid with a true vapor pressure less than 27.6 kPa (4.0 psia) at 294.3 K (70 °F) is stored; or

4) Used to store crude oil.

(Source: Amended at 14 Ill. Reg. 9173, effective May 23, 1990)

Section 215.125 Compliance Dates and Geographical Areas

a) Except as otherwise stated in subsection (b), every owner or operator of an emission source subject to Sections 215.123 or 215.124 shall comply with its standards and limitations by December 31, 1983.

b) If an emission source is not located in one of the counties listed below and is also not located in any county contiguous thereto, the owner or operator of the emission source shall comply with the requirements of Sections 215.123 and 215.124 no later than December 31, 1987:

Cook	Macoupin
DuPage	Madison
Kane	Monroe
Lake	Saint Clair

(BOARD NOTE: These counties are proposed to be designated as nonattainment by the United States Environmental Protection Agency at 47 Fed. Reg. 31588, July 21, 1982).

c) Notwithstanding subsection (b), if any county is designated as nonattainment by the United States Environmental Protection Agency (USEPA) at any time subsequent to the effective date of this Section, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise be subject to the compliance date in subsection (b) shall comply with the requirements of Sections 215.123 and 215.124 within one year from the date of redesignation but in no case later than December 31, 1987.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.126 Compliance Plan

a) The owner or operator of an emission source subject to Section 215.125(a) shall submit to the Agency a compliance plan as required by 35 Ill. Adm. Code 201.241, including a project completion schedule where applicable, no later than April 21, 1983.

b) The owner or operator of an emission source subject to Section 215.125(b) shall submit to the Agency a compliance plan, including a project completion schedule where applicable, no later than December 31, 1986.

c) The owner or operator of an emission source subject to Section 215.125(c) shall submit a compliance plan, including a project completion schedule within 90 days after the date of redesignation, but in no case later than December 31, 1986.

d) Unless the submitted compliance plan or schedule is disapproved by the Agency, the owner or operator of a facility or emission source subject to the rules specified in subsections (a), (b) or (c) may operate the emission source according to the plan and schedule as submitted.

e) The plan and schedule shall meet the requirements of 35 Ill. Adm. Code 201.241 including specific interim dates as required in 35 Ill. Adm. Code 201.242.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.127 Emissions Testing

a) Any tests of organic material emissions, including tests conducted to determine control equipment efficiency, shall be conducted in accordance with the methods and procedures specified in Section 215.102.

b) Upon a reasonable request by the Agency, the owner or operator of an organic material emission source required to comply with this Subpart shall conduct emissions testing, at such person's own expense, to demonstrate compliance.

c) A person planning to conduct an organic material emission test to demonstrate compliance with this Subpart shall notify the Agency of that intent not less than 30 days before the planned initiation of the tests so the Agency may observe the test.

(Source: Added at 14 Ill. Reg. 9173, effective May 23, 1990)

Section 215.128 Measurement of Seal Gaps

a) Any measurements of secondary seal gaps shall be conducted in accordance with the methods and procedures specified in 40 CFR 60, Subpart Kb incorporated by reference in Section 215.105.

b) A person planning to conduct a measurement of seal gaps to demonstrate compliance with this Subpart shall notify the Agency of that intent not less than 30 days before the planned performance of the tests so the Agency may observe the test.

(Source: Added at 14 Ill. Reg. 9173, effective May 23, 1990)

PART 215
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS
SUBPART K: USE OF ORGANIC MATERIAL

Section 215.301 Use of Organic Material

No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in Sections 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.302 Alternative Standard

Emissions of organic material in excess of those permitted by Section 215.301 are allowable if such emissions are controlled by one of the following methods:

a) Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water; or,

b) A vapor recovery system which adsorbs and/or condenses at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere; or,

c) Any other air pollution control equipment approved by the Agency capable of reducing by 85 percent or more the uncontrolled organic material that would be otherwise emitted to the atmosphere.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.303 Fuel Combustion Emission Sources

The provisions of Sections 215.301 and 215.302 shall not apply to fuel combustion emission sources.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.304 Operations with Compliance Program

The provisions of Section 215.301 and 215.302 shall not apply to any owner, operator, user or manufacturer of paint, varnish, lacquer, coatings or printing ink whose compliance program and project completion schedule, as required by 35 Ill. Adm. Code 201, provides for the reduction of organic material used in such process to 20 percent or less of total volume by May 30, 1975.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.305 Viscose Exemption (Repealed)

(Source: Repealed at 9 Ill. Reg. 13960, effective August 28, 1985)

PART 215
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS
SUBPART N: VEGETABLE OIL PROCESSING

Section 215.340 Hexane Extraction Soybean Crushing

The owner or operator of a hexane extraction soybean crushing source, which would emit volatile organic material in excess of 100 tons per year in the absence of pollution control equipment or enforceable operating permit limitation, shall not cause or allow emissions to exceed:

a) 0.0026 lbs of volatile organic material per pound of conventional soybean crush, and

b) 0.0052 lbs of volatile organic material per pound of specialty soybean crush.

(Source: Added at 8 Ill. Reg. 13254, effective July 12, 1984)

Section 215.342 Hexane Extraction Corn Oil Processing

The owner or operator of a hexane extraction corn oil source, which would emit volatile organic material in excess of 100 tons per year in the absence of control equipment or enforceable operating permit limitation, shall not cause or allow emissions to exceed more than 2.2 gals of volatile organic material per ton of raw corn germ processed.

(Source: Added at 8 Ill. Reg. 13254, effective July 12, 1984)

Section 215.344 Recordkeeping For Vegetable Oil Processes

a) The owner or operator of sources subject to Section 215.340 and 215.342 shall maintain daily records of solvent storage inventory, and conventional and specialty soybean crush or raw corn germ. Each day the total decrease in solvent storage inventory, and total conventional and specialty soybean crush or raw corn germ for the previous 180 days shall be calculated.

b) The Agency shall have access to records required under this Section upon reasonable notice.

(Source: Added at 8 Ill. Reg. 13254, effective July 12, 1984)

Section 215.345 Compliance Determination

a) Each day, the owner or operator of sources subject to Section 215.340 shall calculate the sum of:

1) Total conventional soybean crush for the previous 180 days, in pounds, multiplied by 0.0026, plus

2) Total specialty soybean crush for the previous 180 days, in pounds, multiplied by 0.0052.

b) Each day, the owner or operator of sources subject to Section 215.342 shall calculate the sum of the total raw corn germ processed for the previous 180 days, in tons multiplied by 2.2.

c) If such sum is less than the total decrease in solvent storage inventory over the previous 180 days, then the provisions of Section 215.340 or 215.342, whichever is applicable, shall be deemed to have been exceeded.

(Source: Added at 8 Ill. Reg. 13254, effective July 12, 1984)

Section 215.346 Compliance Dates and Geographical Areas

a) Except as otherwise stated in subsection (b), every owner or operator of an emission source subject to Sections 215.340 through 215.345 shall comply with the standards and limitations of those Sections by December 31, 1985.

b) If an emission source is not located in one of the counties listed below, the owner or operator of the emission source shall comply with the requirements of Sections 215.340 through 215.345 no later than December 31, 1987:

Bond	Madison
Clinton	McHenry
Cook	Monroe
DeKalb	Montgomery
DuPage	Morgan
Franklin	Pope
Greene	Randolph
Jackson	Saline
Jersey	Sangamon
Johnson	St. Clair
Kane	Union
Kendall	Washington
Lake	Will
Macoupin	Williamson

(BOARD NOTE: The USEPA noted in its redesignation rulemaking, that it will publish a rulemaking notice on Williamson County's attainment status. (45 Fed. Reg.

21949, May 16, 1983) Should Williamson County be re-designated as attainment prior to December 31, 1984, it and the counties contiguous to it will be considered deleted from the above list.)

c) Notwithstanding subsection (b), if any county is redesignated as nonattainment by the USEPA at any time subsequent to the effective date of this Section, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise by subject to the compliance date in subsection (b) shall comply with the requirements of Sections 215.340 through 215.345 within one year from the date of redesignation but in no case later than December 31, 1987.

(Source: Added at 8 Ill. Reg. 13254, effective July 12, 1984)

PART 216
CARBON MONOXIDE EMISSIONS

SUBPART A: GENERAL PROVISIONS

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SUBPART N: PETROLEUM REFINING AND CHEMICAL MANUFACTURE

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216.361 Petroleum and Petrochemical Processes
216.362 Polybasic Organic Acid Partial Oxidation Manufacturing Processes

SUBPART O: PRIMARY AND FABRICATED METAL PRODUCTS

Section
216.381 Cupolas
216.382 Exception, General Motor's Ferrous Foundry in Vermilion County

Appendix A Rule into Section Table
Appendix B Section into Rule Table
Appendix C Compliance Dates

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1991, Ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 206: Carbon Monoxide Emissions, R71-23, 4 PCB 191, April 13, 1972, filed and effective April 14, 1972; amended at 3 Ill. Reg. 47, p. 92, effective November 8, 1979; amended at 4 Ill. Reg. 24, p. 514, effective June 4, 1980; codified at 7 Ill. Reg. 13607; amended in R87-18 at 12 Ill. Reg. 20774, effective December 6, 1988; amended in R90-23 at 16 Ill. Reg. 18075, effective November 13, 1992.

PART 216
CARBON MONOXIDE EMISSIONS

SUBPART A: GENERAL PROVISIONS

Section 216.100 Scope and Organization

a) This Part contains standards and limitations for carbon monoxide emissions from stationary sources.

b) Permits for sources subject to this Part may be required pursuant to 35 Ill. Adm. Code 201.

c) Notwithstanding the provisions of this Part, the air quality standards contained in 35 Ill. Adm. Code 243 may not be violated.

d) This Part includes Subparts arranged as follows:

1) Subpart A: General Provisions;

2) Subparts B-J: Fuel Combustion Sources and Incinerators;

3) Subparts K-M: Reserved for Emission Process Sources;

4) Subparts N-End: Industry and Site-specific rules.

e) Rules have been grouped for convenience of the public; the scope of each is determined by its language and history.

Section 216.101 Measurement Methods

Carbon Monoxide concentrations in an effluent stream shall be measured by the non-dispersive infrared method or by other methods approved by the Illinois Environmental Protection Agency (Agency) according to the provisions of 35 Ill. Adm. Code 201.

Section 216.102 Abbreviations and Conversion Factors

a) The following abbreviations are used in this Part:

Btu	British thermal unit (60 F)
CO	carbon monoxide
°C	degrees Centigrade
°F	degrees Fahrenheit

kg	kilograms
lbs	pounds
mmBtu/hr	million Btu per hour
MW	Megawatts; one million watts
ppm	parts per million

b) The following conversion factors have been used in this Part:

English	Metric
1.0 mmBtu/hr	0.293 MW
2.205 lbs	1 kg

Section 216.103 Definitions

The definitions contained in 35 Ill. Adm. Code 201 and 211 apply to this Part.

Section 216.104 Incorporations by Reference

The following materials are incorporated by reference: non-dispersive infrared method, 40 CFR 60, Appendix A, Method 10 (1982).

PART 216
CARBON MONOXIDE EMISSIONS
SUBPART B: FUEL COMBUSTION EMISSION SOURCES

Section 216.121 Fuel Combustion Emission Sources

No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

Section 216.122 Exception, Midwest Grain Products

The standard for carbon monoxide of Section 216.121 does not apply to emissions from the fluidized bed combustion boiler of Midwest Grain Products of Illinois, located in Pekin, Illinois, where the emission of carbon monoxide shall not exceed 700 parts per million, corrected to 50 percent excess air. Compliance shall be based upon a one-hour average.

(Source: Added at 12 Ill. Reg. 20774, effective December 6, 1988)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER C : EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 217
NITROGEN OXIDES EMISSIONS

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217.121 New Emission Sources

SUBPART C: EXISTING FUEL COMBUSTION EMISSION SOURCES

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217.141 Existing Emission Sources in Major Metropolitan Areas

SUBPART K: PROCESS EMISSION SOURCES

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217.301 Industrial Processes

SUBPART O: CHEMICAL MANUFACTURE

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217.381 Nitric Acid Manufacturing Processes

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217.830 Limitations on NO_x Emission Reductions
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Appendix A Rule into Section Table
Appendix B Section into Rule Table
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Appendix D Non-Electrical Generating Units
Appendix E Large Non-Electrical Generating Units
Appendix F Allowances for Electrical Generating Units

Authority: Implementing Sections 9.9 and 10 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/9.9, 10, 27 and 28.5].

Source: Adopted as Chapter 2: Air Pollution, Rule 207: Nitrogen Oxides Emissions, R71-23, 4 PCB 191, April 13, 1972, filed and effective April 14, 1972; amended at 2 Ill. Reg. 17, p. 101, effective April 13, 1978; codified at 7 Ill. Reg. 13609; amended in R01-9 at 25 Ill. Reg. 128, effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4597, effective March 15, 2001; amended in R01-16 and R0-17 at 25 Ill. Reg.5914, effective April 17, 2001.

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SUBPART A: GENERAL PROVISIONS

Section 217.100 Scope and Organization

a) This Part sets standards and limitations for emission of oxides of nitrogen from stationary sources.

b) Permits for sources subject to this Part may be required pursuant to 35 Ill. Adm. Code 201.

c) Notwithstanding the provisions of this Part the air quality standards contained in 35 Ill. Adm. Code 243 may not be violated.

d) These rules have been grouped for convenience of the public; the scope of each is determined by its language and history.

(Source: Amended at 25 Ill. Reg. 108, effective December 26, 2000)

Section 217.101 Measurement Methods

Measurement of nitrogen oxides shall be according to:

a) The phenol disulfonic acid method, 40 CFR 60, Appendix A, Method 7 (1999);

b) Continuous emissions monitoring pursuant to 40 CFR 75 (1999); and

c) Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure), 40 CFR 60, Appendix A, Method 7E (1999).

(Source: Amended at 25 Ill. Reg. 108, effective December 26, 2000)

Section 217.102 Abbreviations and Units

a) The following abbreviations are used in this Part:

btu	British thermal unit (60°F)
EGU	Electrical Generating Unit
kg	kilogram
kg/MW-hr	kilograms per megawatt-hour, usually used as an hourly emission rate
lb	pound
NO_x	Nitrogen Oxides
lbs/mmbtu	pounds per million btu, usually used as an hourly emission rate
Mg	megagram or metric tonne
mmbtu	million British thermal units
mmbtu/hr	million British thermal units per hour
MWe	megawatt of electricity
MW	megawatt; one million watts

MW-hr	megawatt-hour
peoc	potential electrical output capacity
ppm	parts per million
ppmv	parts per million by volume
T	English ton

b) The following conversion factors have been used in this Part:

English	Metric
2.205 lb	1 kg
1 T	0.907 Mg
1 lb/T	0.500 kg/Mg
mmbtu/hr	0.293 MW
1 lb/mmbtu	1.548 kg/MW-hr

(Source: Amended at 25 Ill. Reg. 108, effective December 26, 2000)

Section 217.103 Definitions

The definitions contained in 35 Ill. Adm. Code 201 and 211 apply to this Part.

Section 217.104 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

a) The phenol disulfonic acid method, as published in 40 CFR 60, Appendix A, Method 7 (1999);

b) 40 CFR 96, subparts B, D, G, and H (1999);

c) 40 CFR 96.1 through 96.3, 96.5 through 96.7, 96.50 through 96.54, 96.55 (a) & (b), 96.56 and 96.57 (1999);

d) 40 CFR 72, 75 & 76 (1999);

e) Alternative Control Techniques Document---- NO_x Emissions from Cement Manufacturing, EPA-453/R-94-004, U. S. Environmental Protection Agency-Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, March 1994;

f) Section 11.6, Portland Cement Manufacturing, AP-42 Compilation of Air Emission Factors, Volume 1: Stationary Point and Area Sources, U.S. Environmental Protection Agency-Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, revised January 1995;

g) 40 CFR 60.13 (1999); and

h) 40 CFR 60, Appendix A, Methods 7, 7A, 7C, 7D, and 7E (1999).

(Source: Amended at 25 Ill. Reg. 4597, effective March 15, 2001)

SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

Section 217.121 New Emission Sources

No person shall cause or allow the emission of nitrogen oxides (NO_x) into the atmosphere in any one hour period from any new fuel combustion emission source with an actual heat input equal to or greater than 73.2 MW (250 mmbtu/hr) to exceed the following standards and limitations:

a) For gaseous fossil fuel firing, 0.310 kg/MW-hr (0.20 lbs/mmbtu) of actual heat input;

b) For liquid fossil fuel firing, 0.464 kg/MW-hr (0.30 lbs/mmbtu) of actual heat input;

c) For dual gaseous and liquid fossil fuel firing, 0.464 kg/MW-hr (0.30 lbs/mmbtu) of actual heat input;

d) For solid fossil fuel firing, 1.08 kg/MW-hr (0.7 lbs./mmbtu) of actual heat input;

e) For fuel combustion emission sources burning simultaneously any combination of solid, liquid and gaseous fossil fuels, an allowable emission rate shall be determined by the following equation:

$$E = (AG + BL + CS)\ Q$$

Where:

E = Allowable nitrogen oxides emissions rate

Q = Actual heat input derived from all fossil fuels

G = Percent of actual heat input derived from gaseous fossil fuel

L = Percent of actual heat input derived from liquid fossil fuel

S = Percent of actual heat input derived from solid fossil fuel

$G + L + S = 100.0$

and, where A, B, C and appropriate metric and English units are determined from the following table:

	Metric	English
E	kg/hr	lbs/hr
Q	MW	mmbtu/hr
A	0.023	0.003
B	0.023	0.003
C	0.053	0.007

10.4 Attachment 4 - State Construction and Operating Permits

The following permits and attachments contain applicable requirements to this source and are an integral part of this permit. The permit conditions contained in these attachments should be thoroughly reviewed and complied with, including all emission limitations, monitoring, recordkeeping, and reporting requirements. **In the event that there are conflicting provisions in the incorporated State Construction and Operating Permits, the most recently issued permit conditions shall apply.** Also if any requirements of these permits and attachments that conflict with those requirements found in Sections 3 through 9 are superseded by those requirements found in Sections 3 through 9.

217/782-2113

CONSTRUCTION PERMIT GRANT - REVISED

PERMITTEE

Lauhoff Grain Co.
Attn: Richard E. Fentem
321 East North St.
Danville, IL 61832

Application No.: 90100058 I.D. No.: 183020ABT
Applicant's Designation: 215-01 Date Received: June 12, 1991
Subject: Fluid Bed Dryer and Soy Dehulling
Date Issued: August 27, 1991
Location: 321 East North St., Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a fluid bed dryer controlled by three cyclones and a soy dehuller, operation controlled by a baghouse as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Operating Hours (Hour/Year)	Particulate Matter Emissions (Lb/Hour)	(Tons/Year)
Fluid Bed Dryer	8568	2.7	11.6
Soy Dehulling	8568	0.31	1.3

These limits are based on a process weight rate of 360,000 lbs/hour and combined control efficiency of the fluid bed dryer cyclones at 99.85%. Compliance with annual limits shall be determined from a running total of 12 months of data.

2. Within 180 days of initial startup of new equipment or achievement of normal operation, the meal dryer and cooling tower and reserve germ cooling tower (201-12, 201-13, and 208-08) shall permanently cease operation.

3. Appropriate operating records shall be maintained to allow the Agency to review compliance with the limits in Condition 1.

It should be noted that this permit has been revised removing previous Condition 2 which required testing of particulate matter emissions.

It should also be noted that the net increase in particulate matter from the fluid bed dryer and soy dehulling may be less than the 12.9 tons/year allowed

by Condition 1. This is because they are accompanied by a contemporaneous decrease in actual emissions of particulate matter from the shutdown of equipment, as addressed by Condition 2.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:mab/672L/sp/87-88

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Richard Fentem
321 East North Street
Danville, Illinois 61832

Application No. 92040058
Applicant's Designation: SO310-0102
Subject: North Street Truck Dump Aspiration
Date Issued: April 28, 1992
Location: 321 East North Street, Danville

I.D. No.: 183020ABT
Date Received: April 16, 1992

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a baghouse as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon replacement of two 9,600 scfm baghouses with a 35,000 scfm baghouse without any increase in emissions above those previously allowed.

If you have any questions on this, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:jmm/sp/135N/41

cc: Region 3

217/782-2113

"REVISED"
OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Lauhoff Grain Company
Attn: Marvin Woods
Box 571
Danville, IL 61834-0240

Application No.: 85110014 I.D. No.: 183020AHK
Applicant's Designation: COGEN-1 Date Received: May 11, 1993
Operating Permit Expiration Date: May 11, 1996
Subject: Cogeneration Facility
Date Issued: August 9, 1993
Location: 320 E. Madison Street, Danville

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a coal fired boiler with a fabric filter (CFB), one gas or #2 fuel oil fired package boiler (FM), one diesel generator, material storage and handling systems for coal, ash and limestone and two fuel oil storage tanks as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1a. The CFB and FM boilers are subject to New Source Performance Standards (NSPS) for Industrial Steam Generating Units, 40 CFR 60, Subparts A, D and Db. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

b. Pursuant to the NSPS, the following limits are applicable to the CFB boiler:

i. Particulate matter (Subpart Db) - 0.05 lbs/million btu
ii. Sulfur dioxide (Subpart D) - 1.2 lbs/million btu
iii. Nitrogen oxides (Subpart Db) - 0.60 lbs/million btu
iv. Opacity (Subpart Db) - 20%

c. Pursuant to the NSPS, the following limits are applicable to the FM boiler:

i. Particulate matter (Subpart Db) - 0.10 lbs/million btu
ii. Opacity (Subpart Db) - 20%
iii. Nitrogen oxides (Subpart Db) - 0.20 lbs/million btu

d. At all times, the permittee shall also, to the extent practicable, maintain and operate the CFB and FM boilers, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

2a. The emissions from the Circulating Fluidized Bed (CFB) boiler shall not exceed the following rates:

i. PM -- 0.05 lb/10^6 btu.

ii. SO_2 -- 0.8 lb/10^6 btu. This limit is to be met on a daily 24 hour average basis.

iii. NO_x -- 0.6 lb/10^6 btu. This limit is to be met on a daily 24 hour average basis.

iv. CO -- 200 ppm corrected to 50% excess air.

b. The emissions from the Package (FM) Boiler shall not exceed the following rates:

i. PM -- 0.02 lb/10^6 btu.

ii. SO_2 -- 0.3 lb/10^6 btu from firing fuel oil.

iii. NO_x -- 0.2 lb/10^6 btu on a 30 day rolling average basis.

iv. CO -- 200 ppm corrected to 50% excess air.

c. Emissions of particulate matter from limestone and ash silos shall be limited through installation of bag filters designed to emit no more than 0.03 grains/dry cubic foot. Emissions of particulate matter from coal handling and conveying shall be controlled with enclosures and a wet dust suppression system.

Condition 2 represents the application of the Best Available Control Technology for PM, SO_2, NO_x and CO as required by Section 165 of the Clean Air Act. Limits are to be met on an hourly basis unless otherwise specified.

3a. Annual emissions from the CFB and FM boilers shall not exceed the following amounts:

Emissions - Tons/Yr

Boiler	PM	SO_2	NO_x	CO
CFB	69.4	1110.8	833.1	305
FM	3.5	3.1	234.8	47

b. The NO_x limit for the CFB boiler represents an increase of 22.4 tons/yr above the limit in the construction permit. This increase is not the result of any physical modification but rather a greater than anticipated heat input capacity.

c. The NO_x limit for the FM boiler represents an increase of 26.8 tons/yr above the limit that would have been imposed by the construction permit after the Subpart Db NSPS were promulgated. This increase is due to

the addition of a superheating section to the boiler which increased the heat input capacity.

Condition 3 is required to ensure that the project will be operated in accordance with the description presented in the application.

4a. This permit is issued for the standby generator based upon its operation in a standby mode with no net increase in emissions.

b. Except for purposes of testing, the diesel generator shall operate only when the CFB boiler is down or is in the process of being shut down.

5a. The permittee shall maintain and operate continuous opacity, SO_2, NO_x, and O_2 monitoring systems on the CFB boiler, and continuous NO_x and O_2 monitoring systems on the FM boiler. All records with respect to the operation of the monitors shall be retained for two years and shall be available for inspection by the Agency.

b. For both the FM and CFB boilers, the permittee shall fulfill the requirements for monitoring in the NSPS, 40 CFR 60.13 and 60.45.

6. The permittee shall submit quarterly reports to the Agency of any and all opacity, SO_2, NO_x and CO measurements which exceed the respective emission limits per NSPS and BACT limitations as specified above and other applicable limits. These reports shall provide for each such incident, the pollutant emission rate, the date and duration of the incident, and whether it occurred during startup, malfunction, breakdown, or shutdown. If an incident occurred during malfunction or breakdown, all corrective actions taken shall also be reported. These reports shall also specify periods during which the continuous monitoring systems were not in operation. These reports shall be submitted no later than 30 days after the end of the calendar quarter, once shakedown and testing of the boiler are complete.

7. The permittee shall fulfill the requirements for reporting in the NSPS, 40 CFR 60.7(c) and 60.45(g).

8. The permittee shall report analyses of the coal burned in the CFB boiler on a quarterly basis. The reports shall include analyses performed on representative grab samples of coal at a frequency of no less than weekly.

9. All required notification and reports shall be sent to the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Field Operations Section
2009 Mall St.
Collinsville, Illinois 62234
618/346-5120

10. Operation of the CFB boiler in excess of applicable emission standards is allowed during startup, malfunction and breakdown.

11. The Permittee shall notify the Agency's regional office by telephone as soon as possible during normal working hours upon the occurrence of excess emissions due to malfunctions, or breakdowns. The Permittee shall comply with all reasonable and safe directives of the regional office regarding such malfunctions and breakdowns. Within five (5) working days of such occurrence the Permittee shall give a written follow-up notice to the Agency's regional office providing an explanation of the occurrence, the length of time during which operation continued under such conditions, measures taken by the Permittee to minimize excess emissions and correct deficiencies, and when normal operation resumed.

12a. The permittee shall maintain records of excess emissions during malfunctions and breakdowns. As a minimum, these records shall include:

(i) date and duration of malfunction or breakdown;
(ii) a full and detailed explanation of the cause for such emissions;
(iii) the contaminants emitted and an estimate of the quantity of emissions;
(iv) the measures used to reduce the quantity of emissions and the duration of the occurrence; and
(v) the steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

b. These records shall be retained for at least two years following an event, maintained at a readily accessible location at the plant, and be available to representatives of the Agency during normal working and/or operating hours.

If you have any questions on this, please call Shashi Shah at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:SRS:jmm/sp0786L/30-33

cc: IEPA, FOS, Region 3
IEPA, FOS, CMU
USEPA, Region V

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attention: Richard E. Fentem
321 E. North St.
Danville, Illinois 61834

Application No: 97050146
Applicants Designation: SO# 109-05
Subject: General Aspiration System
Date Issued: August 20, 1997
Location: 321 E. North St., Danville

I.D. No.: 183020ABT
Date Received: May 28, 1997

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and /or air pollution control equipment consisting of baghouse on foods packing system as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based on negligible emissions of particulate matter from the baghouse on the general aspiration system. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

If you have any questions concerning this letter, please contact Bruce Rodely at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BDR:bdr/97050146

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Richard E. Fentem
321 E. North Street
Danville, IL 61832

Application No.: 93030045 I.D. No.: 183020ABT
Applicant's Designation: Date Received: March 6, 1995
Subject: General Aspiration Corn Mill 101-5
Date Issued: March 22, 1993
Location: 321 E. North Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a baghouse system 101-05 as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon replacing two baghouses that control SO #105-07 and #105-08 with a single baghouse #101-5, without any increase in emissions of particulate matter into the atmosphere.

If you have any questions on this, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:jmm/sp/119P/26

cc: Region 3

217/782-2113

OPERATING PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Richard Fentem
321 E. North St.
Danville, IL 61832

Application No.: 72121265 I.D. No.: 183020ABT
Applicant's Designation: Date Received: March 10, 1995
Subject: Corn and Soybean Oil Processing
Date Issued: March 27, 1995 Expiration Date: March 20, 1997
Location: 321 E. North St., Danville

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of four solvent condenser systems; edible cooling/storage S.B. Flakes with rotoclone 204-3, edible soya plt. with adsorber 204.4; Gen asp toasted germ cooler with aerodyne separators/filters 206-2; corn and soybean oil extraction with primary and secondary cyclones; DTDC system with cyclone and enclosure 205.01 and DTDC system 210-01 as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. Emissions and operation of equipment shall not exceed the following limits:

Item-of-Equipment	Operating Hours (Hour/Year)	Particulate Matter Emissions Lb/Hour	Ton/Yr
DTDC	8232	5.0	20.2

These limits are based on the maximum projected emissions from this operation based on information provided in the permit application and other emission data available to the Agency. Compliance with annual limits shall be determined from a running total of 12 months of data.

b. Particulate matter$_{10}$ shall constitute no more than 70% of the particulate matter emissions.

If you have any questions on this, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:imm/241P/68

cc: Region 3

217/782-2113

OPERATING PERMIT

PERMITTEE

Lauhoff Grain Company
Attn: Richard E. Fentem
321 East North Street
Danville, IL 61832

Application No.: 72121264
Applicant's Designation:
Subject: Hopper Car Dump
Date Issued: April 12, 1991
Location: 321 East North Street, Danville

I.D. No.: 183020ABT
Date Received: April 9, 1991

Expiration Date: April 9, 1996

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of hopper car dump with a bag collector as described in the above-referenced application. This Permit is subject to standard conditions attached hereto.

It should be noted that the grain dryer is being withdrawn from the operation.

Bharat Mathur, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

BM:SRS:ds:0175M/52

cc: Region 3

217/782-2113

OPERATING PERMIT - REVISED

PERMITTEE

Lauhoff Grain Co.
Attn: Richard E. Fentem
321 East North Street
Danville, Illinois 61832

Application No.: 72121261 I.D. No.: 183020ABT
Applicant's Designation: Date Received: January 26, 1996
Subject: Corn Processing Operation
Date Issued: April 12, 1996 Expiration Date: December 27, 1998
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of corn and soybean process operation (list attached) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Operating Hours (Hour/Year)	Particulate Matter Emissions Lb/Hour	Ton/Yr
SO 112-05	8568	0.23	0.9
Bran filters			
103-06			
109-03			
109-04	8100	0.16	0.6
Bins 601-604	1200	0.08	0.05
Milling filters			
115-02, 03, 04	8112	2.60	10.5

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

2. This permit is issued based upon modifying the corn milling operation by adding related equipment and increasing milling capacity to 100,000 bu/day.

3. For the corn mill production the Permittee shall keep records of the following items and such other items as may be appropriate in order that compliance with the requirements of Condition 2 may be verified.

   a. Maintain operating and maintenance records for the baghouse control system.

b. Amount of corn milled on a monthly basis.

These records required by the permit shall be retained for at least three years. These records shall be available for inspection upon request by the Agency.

4. This permit is issued based on negligible emissions of particulate matter from Micro-Ingredient Dump and Mixing conveyor. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

5. This permit is issued based upon replacing the existing baghouse with a new baghouse for corn mill (101-01), without any increase in emissions of particulate matter into the atmosphere.

6. This permit is issued based upon adding a baghouse to the white goods operation (S.O. 104-2) and general process operations (S.O. 112-31), without any increase in emissions of particulate matter into the atmosphere.

7. This permit is issued based upon replacing two baghouses that controlled SO #105-7 and 08 with a single baghouse 101-05, without any increase in emissions of particulate matter into the atmosphere.

8. This permit is issued based upon adding a new rail loadout without an increase in throughput and without increasing particulate matter into the atmosphere.

It should be noted that this permit has been revised to include the operation of the equipment described in Construction Permit 95070081.

It should be noted that this permit has been revised to include operation of the equipment described in construction permit 89050063, 90080010, 90110063, 91080010, 93030045, 96010107 and also to show that the following sources have been removed from services 112-01 #1 expander and 112-02 #2 expander.

If you have any questions on this, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:sad

cc: Region 3

217/782-2113

OPERATING PERMIT - REVISED

PERMITTEE

Lauhoff Grain Co.
Attn: Richard Fentem
321 East North Street
Danville, IL 61832

Application No.: 72120886 I.D. No.: 183020ABT
Applicant's Designation: S0310-0102 Date Received: April 16, 1992
Subject: Storage Elevator
Date Issued: April 29, 1992 Expiration Date: March 13, 1994
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of (list attached) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon replacement of two 9,600 scfm baghouses with a 35,000 scfm baghouse without any increase in emissions above those previously allowed.

2. This permit is issued based upon replacement of existing baghouses with new baghouses for the headhouse and transportation (301-047), and storage elevation west headhouse (301-01), without any increase in emissions above those previously allowed.

It should be noted that 5901this permit has been revised to include operation of the equipment described in construction permits 89090004, 90080010 and 92040058.

If you have any questions on this, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:jmm/sp/135N/42

cc: Region 3

Attachment

1. Gen aspiration west head house elevator operations with baghouse 301-02.
2. Gen aspiration sec. D, E with baghouse 304-02.
3. Dust return system collector with baghouse and air locks 310-02.
4. Gen aspiration truck dump with baghouse 310-01.
5. Gen aspiration truck dump with baghouse 301-02.
6. Gen aspiration sec. D-E with baghouse 304-03.
7. Gen aspiration head house and transfer system with baghouse 301-4.
8. Val cl. system truck 6/head house with separator and baghouse 301-05.
9. Gen aspiration for storage elev with baghouse 301-01.
10. Transfer belt (311-01), overhead belt (311-02) and return belt (311-03) with baghouse.

DMH:mab/539K/20

217/782-2113

OPERATING PERMIT - REVISED

PERMITTEE

Lauhoff Grain Co.
Attention: Richard E. Fentem
321 E. North St.
Danville, Illinois 61832

Application No: 72121261
Applicants Designation:
Subject: Corn Processing Operation
Date Issued: August 20, 1997
Location: 321 E. North St., Danville

I.D. No.: 183020ABT
Date Received: May 28, 1997

Expiration Date: December 27, 1998

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and /or air pollution control equipment consisting of corn and soybean process operation (list attached) as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based on the fact that the above-specified units are identified in the Permittee's pending application for a CAAPP permit and are certified, by Permittee, to be in compliance with applicable regulations.

2. This permit does not preclude any future permitting review and evaluation nor does it shield the Permittee from any legal action for noncompliance with or circumvention of, applicable regulations.

It should be noted that a detailed review of the specified units will be performed during review of the pending CAAPP application submitted for these units.

If you have any questions concerning this letter, please contact Bruce Rodely at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BDR:bdr/97050146

cc: Region 3

Emission Sources included in Permit 72121261

1. general aspiration for corn mill 101-05
2. gen aspiration regrind sys 105-09 with baghouse
3. gen aspiration RR track loading 105-10 with baghouse
4. gen aspiration dryer - coolers 105-11 with cyclone
5. MIGA dryer corn grits 105-12 with cyclone to roto-clone
6. storage to package allowed 110-1 with cyclone to baghouse
7. storage to package soya floor 110-2 with cyclone
8. storage to package all-bond 110-3 with cyclone to baghouse
9. storage to package corn flour 110-4 with cyclone to baghouse
10. gen aspiration to packaging building 110-5 with cyclone to baghouse
11. gen aspiration packaging building 110-6 with baghouse
12. aspiration system packers A110 packer 110-7 with baghouse
13. gen aspirator flour packer 110-8 with baghouse
14. gen aspirator mill elevator 110-9 with baghouse
15. transfer to blend system of soya flour 111-17 with cyclone baghouse
16. gen aspirator all-bond loadout 111-3 with baghouse
17. transfer to storage of corn pellets 111-4 with 2 cyclones to baghouse
18. transfer to blend corn pellets (PCM) 111-5 with cyclone to baghouse
19. gen aspiration PCM to blending 111-6 with baghouse
20. transfer to reprocess bean meal 111-7 with cyclone to baghouse
21. gen aspiration bean meal sterilization sys 111-9 with cyclone
22 gen aspiration bean meal surge bins 111-8 with baghouse
23. transfer to storage bins bean meal 111-10 with cyclone to baghouse
24. Sources 24-27 transferred to Permit 72120836. Sources 24-27 will be left blank to maintain numbers matching TAS sources
28. gen aspiration soya flour to pack/blend 111-16 with baghouse
29. transfer to blend misc. ingredient 111-18 with cyclone to baghouse

30. gen aspiration misc. ingredient hopper 111-19 with baghouse
31. gen aspiration soya flour weigh bin 111-20 with baghouse
32. gen aspiration batch bin 111-21 with baghouse
33. gen aspiration blender 111-22 with baghouse
34. gen aspiration corn-soya (CSM) blend 111-23 with baghouse
35. transfer to storage corn-soya (CSM) 111-24 with cyclone to baghouse
36. transfer to storage corn-soya (CSM) 111-25 with cyclone to baghouse
37. gen aspiration CSM to pack 111-26 with baghouse
38. transfer raw material to hibond sys 111-27 with baghouse
39. gen aspiration hibond syst 111-28 with baghouse
40. hibond recycle system 111-29 with baghouse
41. transfer to storage hibond 111-30 with two cyclones to baghouse
42. gen aspiration hibond packing 111-31 with baghouse
43. transfer regrind corn fl to storage 111-32 with baghouse
44. transfer break corn fl to storage 111-33 with baghouse
45. transfer corn fl. to track loading 111-34 with baghouse
46. gen aspiration corn fl to packing 111-35 with baghouse
47. vacuum cleaning 111 building 111-36 with baghouse
48. transfer extracted flakes to storage 111-37 with baghouse
49. transfer extracted soybean flakes to sizing 111-38 with baghouse
50. transfer sized soybean meal to screen bin 11-39 with baghouse
51. gen aspiration sizing and storage 111-40 with baghouse
52. cooling tower for bin 503 111-41 with baghouse
53. Wenger expander raw material supply system 112-3 with cyclone to baghouse
54. No. 3 expander raw material supply system 112-4 cyclone to baghouse
55. transfer expander system to grading 112-5 with baghouse
56. transfer expander to all-bond grinding 112-5 with cyclone

57. gen aspiration all bond surge bin 112-7 with baghouse
58. grinding system corn pellets 112-8 with baghouse
59. gen aspiration finished all-bond surge bin 112-9 with baghouse
60. gen aspiration PCM grinding 112-10 with baghouse
61. grinding system PCM 112-11 with cyclone to baghouse
62. gen aspiration finished PCM bins 112-12 with baghouse
63. transfer bean meal to grind system 112-13 with cyclone to baghouse
64. transfer bean meal to grind system 112-14 with cyclone to baghouse
65. grinding systems soybean meal 112-15, 16 with two baghouses
66 recycle system bean ML grind system 112-17 with cyclone to baghouse
67. grind system bean meal 112-18 with baghouse
68. gen aspiration grinding surge bins 112-19 with baghouse
69. gen aspiration grinding surge bins 112-20 with baghouses
70. gen aspiration finished product surge gins 112-21 with baghouse
71. gen aspiration finish soy fl surge bins 112-22 with baghouse
72. grind system bean meal scrap col 112-23 with baghouse
73. gen aspiration bean meal scrap surge bin 112-24 with baghouse
74. gen aspiration hibond grind surge bin 112-26 with baghouse
75. transfer hibond grind to sift 112-27 with cyclone to baghouse
76. gen aspiration finish hibond surge bin 112-26 with baghouse
77. vacuum cleaning 112 building 112-29 with baghouse
78. gen aspiration all bond grind surge bin 112-30 with baghouse
79. grinding sample room 348-1 with baghouse
80. hopper car cleaning tacks and misc. 500-01 with baghouse
81. bran bin filter 103-06, bran process filter 109-03 and bran dryer filter 109-04
82. general process filter 112-31

83. rail loadout (Construction Permit 95070081)

84. Milling filters 115-02, 03, 04

DMH:TDP:sad

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Richard E. Fentem
321 E. North Street
Danville, IL 61832

Application No.: 91080010 I.D. No.: 183020ABT
Applicant's Designation: S.O.112-31 Date Received: August 5, 1991
Subject: General Process Aspiration Filter
Date Issued: October 3, 1991
Location: 321 E. North Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a baghouse for general process operations as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon adding a baghouse without any increase in emissions of particulate matter into the atmosphere.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:jmm/sp/653M/81

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Richard E. Fentem
321 East North Street
Danville, IL 61832

Application No.: 90110063
Applicant's Designation: S.O.104-02
Subject: White Good Aspiration Filter
Date Issued: February 1, 1991
Location: 321 East North Street, Danville

I.D. No.: 183020ABT
Date Received: November 16, 1990

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a white goods baghouse (S.O. 104-02) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon adding a baghouse to an existing operation, without any increase in emissions of particulate matter into the atmosphere.

Bharat Mathur, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

BM:DMH:jmm/sp0011M/4

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Richard E. Fentem
321 East North Street
Danville, IL 61832

Application No.: 90080010 I.D. No.: 183020ABT
Applicant's Designation: Date Received: August 3, 1990
Subject: Baghouse and Related Equipment Replacement
Date Issued: August 17, 1990
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a replacement baghouse as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon replacing existing baghouses with new baghouses for the head house (301-047), truck loading (209-01) and corn mill (101-01), without any increase in emissions of particulate matter into the atmosphere.

Bharat Mathur, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

BM:DMH:jmm/sp0461L/28

cc: Region 3

2178/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: R.E. Fentem
321 East North Street
Danville, Illinois 61832

Application No.: 89050063 I.D. No.: 183020ABT
Applicant's Designation: SO111-42 Date Received: May 18, 1989
Subject: Bins 601-604 Micro-Ing. & Mix Conveyor
Date Issued: June 29, 1989
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of bins 601-604, MICRO-Ingredient dump S.O. 111-46 and Mixing conveyor 49-03:04, all with baghouse controls as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Operating Hours (Hour/Year)	Particulate Matter Emissions (Lb/Hour)	(Tons/Year)
Bins 601-604	1200	0.08	0.12

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

2. This permit is issued based on negligible emissions of particulate matter from Micro-Ingredient dump and Mixing conveyor. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.

Terry A. Sweitzer, P.E.
Manager, Permit Section
Division of Air Pollution Control

TAS:DMH:mab/317K/84

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT - REVISED

PERMITTEE

Lauhoff Grain Co.
Attention: R.E. Fentem
321 East North St.
Danville, Illinois 61832

Application No.: 86070013 I.D. No.: 183020ABT
Applicant's Designation: 101-2&1014 Date Received: July 7, 1986
Subject: Baghouse Mod 101-2 New Baghouse 101-4
Date Issued: September 9, 1986
Location: 321 East North St., Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a control modification and a new baghouse as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon replacement of a baghouse with a new baghouse without any increase in emissions from the thru-stock operation 101-02 above those previously allowed.

2. This permit is issued based upon adding a baghouse to the corn mill 101-04 operation without any increase in emissions above those previously allowed.

It should be noted that this permit has been revised to show the addition of a new baghouse for the corn mill operation.

Bharat Mathur, P.E.
Manager, Permit Section
Division of Air Pollution Control

BM:DMH:bjh/1791F/38

cc: Region 3

2178/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attention: Richard E. Fentem
321 E. North St.
Danville, Illinois 61832

Application No.: 85010031 I.D. No.: 183020ABT
Applicant's Designation: 234-01 Date Received: January 14, 1985
Subject: LONG TERM STORAGE
Date Issued: February 14, 1985
Location: 100-200 Block N. Washington St., Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of long term storage with a baghouse as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions of particulate matter shall not exceed 1.3 tons/year. This limit is based on emission rates calculated using a standard emission factor and procedure and the maximum annual throughput (400,000 lbs/hour) indicated in the permit application.

Bharat Mathur, P.E.
Manager, Permit Section
Division of Air Pollution Control

BM:DMH:ct/290E,54

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
321 East North Street
Danville, Illinois 61832

Attention: Richard Fentem

Application No.: 83060026 I.D. No.: 183020ABT
Applicant's Designation: SO204-02 Date Received: June 14, 1983
Subject: Vent System for Corn Oil Extraction Plant
Date Issued: July 26, 1983
Location: 321 E. North Street, Danville, Illinois

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a vent system for the corn oil extraction plant as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon replacement of the existing vent system with the new vent system without any increase in emissions above that previously allowed.

Bharat Mathur, P.E.
Manager, Permit Section
Division of Air Pollution Control

BM:FSM:rd7730C/25

cc: Region 2

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Company
321 East North Street
Danville, Illinois 61832

Attention: Richard E. Fentem

Application No.: 82020007
Applicant's Designation: S O 212-02
Subject: Meal Transport Load Out
Date Issued: June 28, 1982
Location: 321 East North Street, Danville, Illinois

I.D. No.: 183020ABT
Date Received: May 19, 1982

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of 6 bins, conveyors, rail and truck load out and bag house as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions of Particulate matter (TSP) shall not exceed 0.5 tons/year. This limit is based on the maximum operating rate (400,000 Lb/hr) and the maximum hours of operation (8232 hrs/yr) indicated in the permit application.

Bharat Mathur, P.E.
Manager, Permit Section
Division of Air Pollution Control

BM:FSM:jd/4617C/9

cc: Region 2

217/782-2113

CONSTRUCTION PERMIT

Application No.: 81020027
I.D. No.: 183020ABT
Applicant's Designation: 55-500-02
Received: February 13, 1981
Construction of: Extracted FTS Dust System Filter
Location: 321 East North Street, Danville, Illinois

March 6, 1981

Lauhoff Grain Company
321 E. North Street
Danville, Illinois 61832

Attention: Richard E. Fentem

Gentlemen:

Permit is hereby granted to construct the above-referenced equipment subject to standard conditions attached hereto and incorporated herein by reference.

Very truly yours,

Bharat Mathur, P.E.
Manager, Permit Section
Division of Air Pollution Control

BM:JOA:bjm/2765H/5

cc: Region 2

217/782-2113

CONSTRUCTION PERMIT

Application No.: 81060007 I.D. No.: 183020ABT
Applicant's Designation: S O 226-01 Date Received: June 2, 1981
Subject: Rail Loadout System with Aspiration
Date Issued: July 2, 1981
Location: 321 East North Street, Danville, Illinois

PERMITTEE

Lauhoff Grain Co.
321 East North Street
Danville, Illinois 61832

Attention: Richard Fentem

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a soya meal rail loadout station with a general aspiration system and baghouse as described in the above-referenced application. This Permit is subject to standard conditions attached hereto, and the following special condition:

1. Emissions of particulate matter shall not exceed 1.31 tons/year. This limit is based on the maximum emission rate (0.3 lb./hr.) and the maximum hours of operation indicated in the permit application.

Bharat Mathur, P.E.
Manager, Permit Section
Division of Air Pollution Control

BM:FSM:mgg1014c/1

cc: Region 2

217/782-2113

Application No.: 08004054
I.D. No.: 183020ABT S.O. 213-01
Received: April 28, 1980
Construction of: General Aspiration System for Truck Loadout Station
Location: 321 East North Street, Danville, Illinois

May 1, 1980

Lauhoff Grain Company
321 East North Street
Danville, Illinois 61832

Attention: Richard E. Fentem

Gentlemen:

Permit is hereby granted to construct the above-referenced equipment. This permit is granted subject to the following conditions:

1. Standard conditions attached hereto and incorporated herein by reference.

Very truly yours,

Bharat Mathur, P.E.
Manager, Permit Section
Division of Air Pollution Control

BM:JDR:jab/1773B/6

217/782-2113

REVISED CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Company
321 East North Street
Danville, Illinois 61832

Attention: Richard E. Fentem

Application No.: C7205124
Applicant's Designation: 105-10
Subject: Bulk Flour Loadout Track 5
Date Issued: June 1, 1984
Location: 321 East North Street, Danville, Illinois

I.D. No.: 183020ABT
Date Received: May 14, 1984

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of replacement of portions of the equipment of source 105-10 as described in the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon replacement of portions of the equipment for the bulk flour loadout system without any increase in emissions above those previously allowed.

Bharat Mathur, P.E.
Manager, Permit Section
Division of Air Pollution Control

BM:FSM:bls/1185D,12

cc: Region 3

217/782-2113

REVISED CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
321 East North Street
Danville, Illinois 61832

Attention: Richard E. Fentem

Application No.: C7203005 I.D. No.: 183020ABT
Applicant's Designation: 112-05 Date Received: May 2, 1984
Subject: Reprocessing General Aspiration
Date Issued: June 29, 1984
Location: 321 East North Street, Danville, Illinois

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a revised operating rate, hours and control equipment for source 112-05 of the reprocessing system as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions of particulate matter from source112-05 shall not exceed 0.9 tons/year. This limit is based on the maximum emission rate (0.23 lbs/hr) and the maximum hours of operation (,568) indicated in the permit application.

2. This permit is issued based upon replacement of a rotoclone with a baghouse and a reduction in operating rate from 36,000 lbs/hr to 20,000 lbs/hr which will result in a reduction of 11.1 tons/year in the emission of particulate matter. This reduction is based on the average hours and operating rate of the existing operation and the maximum hours and operating rate of the new operation.

Bharat Mathur, P.E.
Manager, Permit Section
Division of Air Pollution Control

BM:FSM:sd/1290d/20

cc: Region 3
ID File

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Company
Attn: Richard E. Fetem
321 East North Street
Danville, Illinois 61832

Application No.: 87010029
Applicant's Designation:
Subject: Bran Bins
Date Issued: February 25, 1987
Location: 321 East North Street, Danville

I.D. No.: 183020ABT
Date Received: January 21, 1987

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of bran bin filter 103-06, bran process filter 109-03, bran dryer filter 109-04 as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following condition(s):

1. Emissions of particulate matter shall not exceed 0.6 tons/year. This limit is based on the maximum emission rate (0.16 lbs) and the maximum hours of operation (8100) indicated in the permit application.

Terry A. Sweitzer, P.E.
Manager, Permit Section
Division of Air Pollution Control

TAS:DMH:jmm/4089H/88

cc: Region 3

217/782-2113

OPERATING PERMIT -- REVISED

PERMITTEE

Bunge Grain Milling, Inc.
Attn: David McDermott
321 East North Street
Danville, Illinois 61832

Application No.: 00010011
Applicant's Designation:
Subject: Expander #4 System
Date Issued: October 1, 2001
Location: 321 East North Street, Robinson

I.D. No.: 183020ABT
Date Received: January 6, 2000

Expiration Date: October 1, 2006

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of an expander #4 system, controlled by existing baghouse (112-31) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1. This permit allows the Permittee to operate an expander #4 system that will give the flexibility to make different products without an increase in mill throughput.

2. This permit is issued based on negligible particulate matters (PM) emissions from the expander system. For this purpose emission shall not exceed 0.1 lb/hour and 0.44 tons/year.

3. At all times, the Permittee shall, maintain and operate the expander system and associated control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

4. The Permittee shall keep an inspection and maintenance log for the baghouse. As a minimum, these logs shall show the data and nature of inspections, performance, preventative maintenance and repair.

Please note that the Permittee should update their CAAPP application to include this equipment by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RNG:jar

cc: Region 3

217/782-2113

REVISED
JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Bunge Grain Milling, Inc.
Attn: David McDermott
321 East North Street
Danville, Illinois 61832

Application No.: 01060084
Applicant's Designation:
Subject: New Expander #5 System
Date Issued: September 24, 2001

I.D. No.: 183020ABT
Date Received: June 28, 2001

Operation Permit Expiration Date: September 21, 2006

Location: 321 East North Street, Robinson

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission unit(s) and/or air pollution control equipment consisting of an expander #5 system, controlled by two existing filter baghouses (112-31 and 111-28) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1. This permit allows the Permittee to construct and operate an expander #5 system that will give the flexibility to make different products without an increase in mill throughput.

2. This permit is issued based on negligible particulate matter (PM) emissions from the new expander system. For this purpose emission shall not exceed 0.1 lb/hour and 0.44 tons/year.

3. At all times, the Permittee shall, maintain and operate the new expander system and associated control equipments, in a manner consistent with good air pollution control practice for minimizing emissions.

4. The Permittee shall keep an inspection and maintenance log for each baghouse. As a minimum, these logs shall show the data and nature of inspections, performance, preventative maintenance and repair.

Please note that the Permittee should update their CAAPP application to include this equipment by submitting Form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RNG:jar

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Bunge Lauhoff
Attn: James M. Lay
321 East North Street
Danville, Illinois 61832

Application No.: 01070073
Applicant's Designation:
Subject: LTMS Filter #2
Date Issued: September 10, 2001
Location: 321 East North Street, Danville

I.D. No.: 183020ABT
Date Received: July 26, 2001

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of LTMS Filter #2 controlling emissions from existing long term meal storage area as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon the installation of LTMS Filter #2 without any increase in emissions of particulate matter to the atmosphere. The existing equipment is covered by a separate operating permit, 72121263.

2. The Permittee may operate the LTMS Filter #2 pursuant to this construction permit until the final action is taken on the Clean Air Act Permit Program (CAAPP) permit application. As a result the Permittee must still update the CAAPP application to include the aforementioned equipment.

If you have any questions on this, please call Minesh Patel at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:MVP:jar

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Bunge Milling, Inc.
Attn: James M. Lay
321 East North Street
Danville, Illinois 61832

Application No.: 02080017 I.D. No.: 183020ABT
Applicant's Designation: BAGHOUSE 115-04 Date Received: August 5, 2002
Subject: Modification to Existing Baghouse 115-04
Date Issued: August 27, 2002
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of changes to dryer controls in the dry room corn mill (Baghouse 115-04) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit allows the Permittee to increase the exhaust air volume for baghouse 115-04, by routing exhaust air of the tail stock dryer (Cyclones 115-06) to this same baghouse.

2. This permit is issued based upon no increase in permitted emissions of particulate matter (PM) and particulate matter less than 10 microns (PM_{10}), because the change to baghouse 115-04 will further control PM/PM_{10} emissions from the tail stock dryer, eliminating cyclones 115-06, as a point of emissions.

3. At all times, the Permittee shall to the extent practicable, maintain and operate the baghouse 115-04, in a manner consistent with good air pollution control practice for minimizing emissions.

4. This permit is issued based on no change in capacity of the dry corn mill.

5. Emissions of PM and PM_{10} from the thru stock and tail stock dryers and other units controlled by baghouse 115-04 combined shall not exceed 1.24 lb/hr and 5.4 tons/year.

6a. Upon written request from the Illinois EPA, the Permittee shall at his own expense, conduct test for PM and PM_{10} emission and opacity in accordance with the applicable test methods and procedures as identified below.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter (PM)	USEPA Method 5

Particulate Matter (PM_{10})	USEPA Method 201A and 202
Opacity	USEPA Method 9

b. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.

c. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:

i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.

iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.

iv. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods.

v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.

d. Copies of the Final Reports(s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized. The Final Report shall include as a minimum:

i. A summary of results.

ii. General information.

iii. Description of test method(s), including description of sample points sampling train, analysis equipment, and test schedule.

iv. Detailed description of test conditions, including:

A. Process information, e.g., equipment feed rate.

B. Control equipment information, i.e., equipment condition and operating parameters during testing.

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

7a. The Permittee shall keep a file containing an estimate of the maximum contribution of PM and PM_{10} (pound/hour) from the tail stock dryer, thru stock dryer and other emission units controlled by Baghouse 115-04, considering maximum exhaust flow and nominal exhaust loading, with supporting documentation.

b. The Permittee shall keep the following records related to emissions of the dry corn mill.

i. The Permittee shall keep an inspection and maintenance log for the baghouse 115-04.

ii. An estimate of excess PM and PM_{10} emissions from each incident when a unit served by baghouse 115-04 operated so as to be unable to comply with the limits required in this permit;

iii. Total annual PM and PM_{10} emission of the units served by baghouse 115-04 based on operating information and applicable emission factors and formulas with supporting calculations.

8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

9. If there is an exceedance of the requirements of this permit as determined by the records required by this permit or by other means, the Permittee shall submit a report to the Illinois EPA's within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

10. Two copies of required reports and notifications concerning emissions equipment operation or performance testing shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
Telephone: 217/782-5811 Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
Telephone: 618/346-5120 Facsimile: 618/346-5155

The Permittee should update their CAAPP application to include changes at the source due to modification on baghouse 115-04 by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information to accomplish this.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RNG:jar

cc: Region 3

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Bunge Milling, Inc.
Attn: James M. Lay
321 East North Street
Danville, Illinois 61832

Application No.: 03040020 I.D. No.: 183020ABT
Applicant's Designation: BAGHOUSE 201-20 Date Received: April 7, 2003
Subject: New Baghouse 201-20
Date Issued: May 8, 2003 Expiration Date: May 8, 2008
Location: 321 East North Streets, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of a new baghouse 201-20 to replace, in part, two existing baghouses (212-01 and 212-02) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit allows the Permittee to install the new baghouse 201-20 to replace two existing baghouses 212-01 and 212-02, to support the existing baghouse 201-01 in the control of material handling from the soybean preparation portion of the soybean extraction process (PEU-5).

2. This permit is issued based on installation of the new baghouse 201-20 not resulting in an increase in material throughput from the soybean extraction process (PEU-5).

3. All equipment in the soybean extraction process (PEU-5) is subject to 35 IAC 212.321(a), which provides that: no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c). [35 IAC 212.321(a)].

4. At all times, the Permittee shall to the extent practicable, maintain and operate the baghouse 201-20, in a manner consistent with good air pollution control practice for minimizing emissions.

5. Emissions of PM and PM_{10} from the new baghouse 201-20 shall not exceed 0.11 lb/hr and 0.47 tons/year and from the existing baghouse 201-01 shall not exceed 0.15 lb/hr and 0.67 tons/year. Total limits for these two filters of 0.26 lb/hr and 1.14 tons/year.

6a. Upon written request from the Illinois EPA, the Permittee shall at his own expense, conduct test for PM and PM_{10} emission and opacity in accordance with the applicable test methods and procedures as identified below.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter (PM)	USEPA Method 5
Particulate Matter (PM_{10})	USEPA Method 201A and 202
Opacity	USEPA Method 9

b. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.

c. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:

i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.

iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.

iv. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods.

v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.

d. Copies of the Final Reports(s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized. The Final Report shall include as a minimum:

i. A summary of results.

ii. General information.

iii. Description of test method(s), including description of sample points sampling train, analysis equipment, and test schedule.

iv. Detailed description of test conditions, including:

A. Process information, e.g., equipment feed rate.

B. Control equipment information, i.e., equipment condition and operating parameters during testing.

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

7a. The Permittee shall keep record of the amount of material being handled in the soybean extraction process (PEU-5).

b. The Permittee shall keep the following records related to emissions for the baghouses 201-20 and 201-01 controlling the material handling from the soybean extraction process (PEU-5).

i. The Permittee shall keep an inspection and maintenance log for the baghouses 201-20 and 201-01.

ii. An estimate of excess PM and PM_{10} emissions from each incident when a unit served by baghouses 201-20 and 201-01 operated so as to be unable to comply with the limits required in this permit;

iii. Total annual PM and PM_{10} emission of the units served by baghouses 201-20 and 201-01 based on operating information and applicable emission factors and formulas with supporting calculations.

8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

9. If there is an exceedance of the requirements of this permit as determined by the records required by this permit or by other means, the Permittee shall submit a report to the Illinois EPA's within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

10. Two copies of required reports and notifications concerning emissions equipment operation or performance testing shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
Telephone: 217/782-5811 Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
Telephone: 618/346-5120 Facsimile: 618/346-5155

The Permittee should update their CAAPP application to include changes at the source due to installation of new baghouse 201-20 by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information to accomplish this.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RNG:jar

cc: Region 3

217/782-2113

OPERATING PERMIT - REVISED

PERMITTEE

Lauhoff Grain Co.
Attn: Richard E. Fentem
321 East North Street
Danville, Illinois 61832

Application No.: 72121263 I.D. No.: 183020ABT
Applicant's Designation: 243-01 Date Received: March 28, 1997
Subject: Soybean Process Operation
Date Issued: May 15, 1997 Expiration Date: July 20, 1999
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of (list attached) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions of particulate matter from the truck loadout system shall not exceed 1.0 tons/year. This limit is based on the maximum controlled emissions and maximum hours of operation specified in the permit application.

2. Emissions of particulate matter from sources 212-02, 212-01, 208-18, 208-17, 205-01 and 203-02 shall not exceed 26.8 tons/year. This limit is based on the maximum controlled emission rate and maximum hours of operation specified in the permit application.

3. Emissions of particulate matter from the long term storage 243-01 shall not exceed 1.3 tons/year. This limit is based on emission rates calculated using a standard emission factor and procedure and the maximum annual throughput (4,000,000 lbs/hour) indicated in the permit application.

4. Emissions of particulate matter from 3 new bran bins shall not exceed 0.6 tons/year. This limit is based on the maximum emission rate (0.16 lbs) and the maximum hours of operation (8100) indicated in the permit application.

5. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Operating Hours (Hr/Yr)	Particulate Matter Emissions Lb/Hr	T/Yr
Fluid bed dryer	8568	2.7	11.6
Soy Dehulling	8568	0.31	1.3

These limits are based on a process weight rate of 360,000 lbs/hour. Compliance with annual limits shall be determined from a running total of 12 months of data.

6. Appropriate operating records shall be maintained to allow the Agency to review compliance with the limits in Conditions 1-5.

7a. Emissions of volatile organic material shall not exceed 0.0026 pounds of volatile organic material per pound of conventional soybeans crushed, pursuant to 35 Ill. Adm. Code 215.340(a).

b. The permittee shall maintain records of solvent inventory and soybean crushed as required by 35 Ill. Adm. Code 215.344.

8. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Process Rate (Lbs/Hr)	Operating Hours (Hr/Yr)	Particulate Matter Emissions (Lb/Hr)	(T/Yr)
Soy Hull Pelletizing 201-19	32,000	8,568	3.4	14.7

These limits are based on information provided in the application. Compliance with annual limits shall be determined from a running total of 12 months of data.

9a. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Agency to review compliance with Condition 1.

i. Operating hours for each emission source.

ii. Amount of soy hull pelletizing processed on a monthly basis.

iii. Operating parameters for air pollution equipment.

b. These records shall be retained for two years and shall be available for inspection and copying by the Agency.

10a. Within 90 days of a written request from the Agency, the particulate matter emissions from equipment in Condition 8 shall be measured by an approved testing service, during conditions representative of maximum emissions, pursuant to 35 Ill. Adm. Code 201.282.

b. At least 30 days prior to the actual date of testing, a written Test Plan shall be submitted to the Agency for review and approval. This plan shall describe the specific procedures for testing, including:

i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

ii. The conditions under which testing will be performed, including a discussion of why these conditions will be representative of

maximum emissions and the means by which the operating parameters for the emission unit will be determined.

iii. The test method(s) which will be used, with the specific analysis method.

c. The Agency shall be notified prior to testing to enable the Agency to observe these tests. Notification for the expected date of testing shall be submitted a minimum of thirty days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five working days prior to the actual date of the tests.

It should be noted that this permit has been revised to remove special condition eight (8) of the permit issued August 21, 1995 and include construction permit 97030149.

If you have questions on this, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:sad

cc: Region 3

Emission Sources Covered by Permit 72121263
All With Cyclone or Baghouse Control

1. Soybean gravity tables
2. Mill building 201-2
3. Transfer ground
4. Bean conditioner replacement system
5. Pellet receiver
6. 4 meal cookers
7. Mill building flaking area replacement system
8. Mill building S201-8
9. Roll stand mill building 201-9
10. Mill building 201-10
11. Bean transfer to clean 201-14
12. Edible soy process 201-15
13. Edible soy grinding 201-16
14. Edible soy process 201-17
14. Transfer of extracted flakes 201-18
16. Meal storage 202-1
17. Meal coating 202-2
18. Vacuum cleaning building 202-3
19. Track 16, hominy feed loading 203-1
20. Track 17, soybean loading 203-2
21. Ground cleaning 208-1
22. Building cleaning 208-2
23. Building cleaning 206-3
24. Flour sifting 208-4
25. Corn products 208-5
26. Hominy feed corn products 208-6
27. Hominy feed corn products 208-7
28. Cleaning building 208-9
29. Corn dryer 208-10
30. Cracked bean conditioner 208-11
31. Corn feed dryer 208-12
32. Flour packing 208-14
33. Truck loadout system
34. Rail loadout system
35. Mean transport loadout 212.02 (construction permit 82020007)
36. Soybean preparation system 212-01 (construction permit 82020008)
37. Branbins (construction permit 87010029)
38. Soy Dehulling 215.02 (Construction permit 9010059)
39. Soy Hull Pelletizing

DMH:sad

217/782-2113

CONSTRUCTION PERMIT -- NSPS SOURCE

PERMITTEE

Lauhoff Grain Company
Attn: Marvin J. Woods
321 East North Street
Danville, Illinois 61832

Application No.: 95060158 I.D. No.: 183020AHK
Applicant's Designation: COGEN-1 Date Received: June 23, 1995
Subject: Petroleum Coke as Supplemental Fuel for CFB Boiler
Date Issued: June 28, 1995
Location: 320 East Madison Street, Danville

Permit is hereby granted to the above-designated Permittee to construct emission source(s) and/or air pollution control equipment consisting of petroleum coke supplemental fuel system for existing circulating fluidized bed boiler as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1. The Permittee shall meet all applicable emission limitations for the circulating fluidized bed boiler currently permitted under operating permit 85110014, while using petroleum coke as supplemental fuel.

2a. Within 90 days of initial startup with the petroleum coke substitution, the effluent stream emissions of the circulating fluidized bed boiler shall be measured by an approved testing service or with the continuous emission monitoring system, during conditions which are representative of maximum emissions.

b. The emission testing or continuous emission monitoring shall be performed for mode, namely, baseline stack test and while burning petroleum coke up to 50% substitution on a weight basis.

c. i. USEPA test methods 40 CFR 60, Appendix A shall be used for following testing by an approved testing service unless another method is approved by the Agency or it is monitored by continuous emission monitoring system.

A. Particulate Matter (Method 5)

B. Sulfur dioxide (Method 6)

C. Carbon Monoxide (Method 10)

D. Opacity (Method 9)

ii. Particulate matter testing requirement may be waived if there are satisfactory completion of other parameters used to demonstrate

compliance with applicable limits. It is a prerequisite to issuance of an operating permit, pursuant to 35 ILL. Adm. Code 201.160(a), (b) and (c).

d. Prior to carrying out these tests, the Agency's regional office and the Agency's Source Emission Test Specialist shall be notified a minimum of thirty (30) days prior to the expected date of these tests and further notified a minimum of five (5) working days prior to the test of the exact date, time and place of these tests, to enable the Agency to witness these tests.

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
2009 Mall Street
Collinsville, Illinois 62234

Illinois Environmental Protection Agency
Attn: Source Emission Test Specialist
Division of Air Pollution Control
Intercontinental Center
1701 First Avenue
Maywood, Illinois 60153

e. Three (3) copies of the Final Report(s) for these tests shall be submitted to the Agency within 14 days after the test results are compiled and finalized, prior to or accompanying the operating permit application. Satisfactory completion of these tests and compliance with the limitations of this Permit shall be a prerequisite to the issuance of an operating permit.

f. A copy of the Summary of Results, General Information, and Conclusions, as contained in the Final Report, shall also be submitted to the Source Emission Test Specialist.

g. The Final Report either through stack testing or continuous emission monitoring shall also include records of laboratory analyses for the coal and maximum petroleum coke substitution rate for the test plan.

It should be noted that this permit is issued to allow petroleum coke substitution for circulating fluidized bed boiler fuel as indicated in the company's letter dated June 22 and 26, 1995.

If you have any questions on this, please contact Shashi Shah at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:SRS:jar

cc: Region 3
USEPA-Region V

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Richard Fentem
1 Lauhoff Center
Danville, Illinois 61832

Application No.: 95070081
Applicant's Designation: S.O. 111-28
Subject: Rail Loadout
Date Issued: August 18, 1995
Location: 321 E. North St., Danville

I.D. No.: 183020ABT
Date Received: July 20, 1995

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a rail loadout with a baghouse control as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon adding a new rail loadout, without any increase in emissions of particulate matter into the atmosphere.

If you have any questions on this, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:sad

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT -- NSPS SOURCE

PERMITTEE

Lauhoff Grain Company
Attn: Marvin J. Woods
321 East North Street
Danville, Illinois 61832

Application No.: 95090146 I.D. No.: 183020ABT
Applicant's Designation: COGEN-2 Date Received: September 12, 1995
Subject: Wood Chips as Supplemental Fuel for CFB Boiler
Date Issued: December 1, 1995
Location: 320 East Madison Street, Danville

Permit is hereby granted to the above-designated Permittee to modify emission source(s) and/or air pollution control equipment consisting of test burn supplemental wood fuel for the existing circulating fluidized bed (CFB) boiler with a fabric filter as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1a. This permit allows the burning of up to 400 tons of wood fuel prepared by chipping wood railroad ties in the existing CFB boiler during the period of December 1, 1995 through January 1, 1996 for the purpose of operational testing.

b. The wood fuel is to be fed into boiler at a maximum rate of 1.5 tons per hour (10% of maximum fuel input to CFB boiler, by weight).

2. All emission limitations and requirements for the CFB boiler under operating Permit 85110014, continue in effect while using wood as supplemental fuel.

3a. The use of wood chips shall be limited to normal mode of operation for the boiler.

b. The use of wood chips shall not be allowed during startup, malfunction and breakdown of the boiler.

4a. The Permittee shall keep the following records for the burning of wood fuel:

i. The source and nature of wood fuel receipts;

ii. The amount of or feed rate for wood fuel, coal and other fuels fired on a hour-by-hour basis; and

iii. Opacity, carbon monoxide, sulfur dioxide and nitrogen oxide data hourly average collected by the continuous emission monitoring systems on a hour-by-hour basis.

b. These records shall be retained for at least three years at a location at the source that is readily accessible for the Agency.

5a. i. As part of the Operation Testing Program for wood fuel, the particulate matter emissions of the CFB boiler shall be measured by an approved testing service during conditions which are representative of maximum emissions, while firing only coal (baseline) and while burning wood up to 10% substitution on a weight basis.

ii. The Agency may waive this testing at the request of the Permittee if the operational testing program is discontinued due to infeasibility or if consistent operation at more than 2.5% wood cannot be achieved or if continuous emission monitoring shows no change in opacity levels while burning wood, as compared to burning of only coal.

b. USEPA Test Method 5, 40 CFR 60, Appendix A shall be used.

c. Prior to carrying out these tests, the Agency's regional office and the Agency's Source Emission Test Specialist shall be notified a minimum of ten (10) days prior to the expected date of these tests and further notified a minimum of two (2) working days prior to the test of the exact date, time and place of these tests, to enable the Agency to witness these tests.

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
2009 Mall Street
Collinsville, Illinois 62234

Illinois Environmental Protection Agency
Attn: Source Emission Test Specialist
Division of Air Pollution Control
Intercontinental Center
1701 First Avenue
Maywood, Illinois 60153

d. Three (3) copies of the Final Report(s) for these tests shall be submitted to the Agency within 14 days after the test results are compiled and finalized. In addition to reporting on the emission testing, the Final Report shall include the opacity, carbon monoxide, sulfur dioxide and nitrogen oxide data measured by the continuous emissions monitoring systems during emissions testing. The Final Report shall also include the results of proximate and elemental analyses for the coal and wood fuel fired in the boiler during testing.

6. Within 60 days of the conclusion of the operational testing program for wood fuel, the Permittee shall submit a Program Completion Report summarizing the amount of wood fuel used, the conclusions of the program with respect to feasibility of firing wood fuel, the effect of wood fuel on emissions, and required practices to assure proper operation of the boiler and associated control equipment while firing wood fuel.

7. If the decision is made to fire wood fuel on a permanent basis, the Permittee shall submit detailed application for revision to the current operating permit to address firing of wood fuel and associated fuel handling and storage activities. The Agency may require additional fuel analyses or emissions testing as part of approval, depending on the results of the trial program.

8. The issuance of this permit does not relieve the Permittee of the responsibility of complying with the provisions of the State of Illinois Rules and Regulations, Title 35, Land Pollution Control, and Section 39.2 of the Environmental Protection Act.

If you have any questions on this permit, please contact Shashi Shah at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:SRS:jar

cc: Region 3
USEPA-Region V
Ted Dragovich - BOL

217/782-2113

CONSTRUCTION PERMIT - REVISED

PERMITTEE

Lauhoff Grain Company
Attn: Marvin J. Woods, Vice President
321 East North Avenue
Danville, Illinois 61832

Application No.: 95100067 I.D. No.: 183020ABT
Applicant's Designation: COGEN-3 Date Received: May 7, 1997
Subject: Circulating Fluidized Bed Boiler - Supplemental Fuel Use
Date Issued: May 22, 1997
Location: 320 East Madison Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of using petroleum coke and tire chips as a supplement fuel to the existing coal feed CFB boiler with a fabric filter as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. The particulate matter and opacity limitations from the previous issued permit #85110014 from CFB boiler shall apply under supplemental fuel use.

b. This Permit is issued for operation modification to CFB boiler for petroleum coke and tire chips substitution, without any significant increase in emissions.

2a. Within 180 days of initial burning of petroleum coke and tire chips, the effluent stream of the existing CFB boiler shall be measured for pollutants as indicated in proposal plan dated September 28, 1995 submitted to the Illinois Environmental Protection Agency.

b. The emission testing or continuous emission monitoring shall be performed for two modes of operation, namely, I Baseline stack test while burning coal and II optimum successful petroleum coke and tire chips (up to 20%) substitution rate established from progressive feed rates as indicated in the application.

c. i. USEPA test methods 40 CFR 60, Appendix A shall be used for following testing by an approved testing service unless another method is approved by the Agency or it is monitored by continuous emission monitoring system.

A. Particulate Matter (Method 5).

B. Sulfur dioxide (Method 6).

C. Carbon Monoxide (Method 10).

D. Opacity (Method 9)

ii. The Agency may waive the particulate matter emissions testing at the request of the Permittee if continuous emission monitoring shows no change in opacity levels while burning petroleum coke and tire chips, as compared to burning of only coal.

d. i. All notifications, submissions and reports required pursuant to this permit shall be sent to the following address unless otherwise specified:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Unit (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
217/782-5811

ii. A copy of these notifications, submissions and reports, other than the Annual Emission Report addressed by Condition 3 and the Test Reports required by Condition 2(e), shall also be sent to the Agency's Air Regional Office at the following address, unless otherwise specified:

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 62619
309/693-5461

e. Three (3) copies of the Final Report(s) for these tests shall be submitted to the Agency within 14 days after the test results are compiled and finalized, prior to or accompanying the operating permit application. Satisfactory completion of these tests and compliance with the limitations of this Permit shall be a prerequisite to the issuance of an operating permit.

f. A copy of the Summary of Results, General Information, and Conclusions, as contained in the Final Report, shall also be submitted to the Source Emission Test Specialist.

g. The Final Report shall include records of laboratory analyses for the coal coke and tire chips, and the maximum tire chips substitution rate for the test plan.

3a. The use of petroleum coke and tire chips shall be limited to normal mode of operation for the CFB boiler.

b. The use of petroleum coke and tire chips shall not be allowed during start up, malfunction and breakdown of the boiler or control equipment.

c. The quantity of petroleum coke and tire chips use for this test plan shall not exceed the petroleum coke and tire chips substitution rate to the conventional fuel as indicated in the application.

d. The Permittee shall keep records of the days and quantity of petroleum coke and tire chips used and submit it to the Field Engineer upon request.

e. The Permittee shall provide updated process flow diagram and description as to how supplemental fuel limitations shall be monitored as part of the incorporation into the operating permit application.

4. With the Annual Emission Report required by 35 Ill. Adm. Code 254, the Permittee shall provide an annual summary of the weight of different fuels burned, i.e., petroleum coke and tire chips with supporting calculations.

It should be noted that this permit is revised to include information as submitted in company's letter dated May 6, 1997.

If you have any questions on this, please call Shashi Shah at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:SRS:jar

cc: Region 3

217/782-2113

OPERATING PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Marvin J. Woods, Vice President
321 East North Street
Danville, Illinois 61832

Application No.: 95100067 I.D. No.: 183020ABT
Applicant's Designation: COGEN-3 Date Received: September 29, 1997
Subject: Circulating Fluidized Bed Boiler - Supplemental Fuel Use
Date Issued: December 18, 1997 Expiration Date: December 17, 2002
Location: 320 East Madison Street, Danville

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of using petroleum coke and tire chips as a supplement fuel to the existing coal feed CFB boiler with a fabric filter as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based on the fact that the above-specified units are identified in the Permittee's pending application for a CAAPP permit and are certified, by Permittee, to be in compliance with applicable regulations.

2. This permit does not preclude any future permitting review and evaluation nor does it shield the Permittee from any level action for noncompliance with or circumvention of, applicable regulations.

It should be noted that a detailed review of the specified units will be performed during review of the pending CAAPP application submitted for these units.

Please note the Permittee should update their CAAPP application to include this equipment modification by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information.

If you have any questions on this, please call Bruce Rodely at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BDR:jar

cc: Region 3

217/782-2113

OPERATING PERMIT - REVISED

PERMITTEE

Bunge Grain Milling, Inc.
Attn: David McDermont
321 East North Street
Danville, Illinois 61832

Application No.: 95100067 I.D. No.: 183020ABT
Applicant's Designation: COGEN-3 Date Received: September 14, 1998
Subject: Circulating Fluidized Bed Boiler - Supplemental Fuel Use
Date Issued: January 14, 1999 Expiration Date: December 17, 2002
Location: 320 East Madison Street, Danville

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of using petroleum coke and tire chips as a supplement fuel to the existing coal feed CFB boiler with a fabric filter and a coal dust collection system on the existing coal transfer system as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Operating Hours (Hour/Year)	Particulate Matter Emissions (Lb/Hour)	(Ton/Year)
F-108 Coal Handling Dust Collector	8,760	1.0	4.38

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

2. This permit is issued based upon adding the coal dust collection system on the existing coal transfer system, which results in a reduction of particulate matter emissions.

3. This permit is issued based on the fact that the above-specified units are identified in the Permittee's pending application for a CAAPP permit and are certified, by Permittee, to be in compliance with applicable regulations.

4. This permit does not preclude any future permitting review and evaluation nor does it shield the Permittee from any legal action for noncompliance with or circumvention of, applicable regulations.

It should be noted that a detailed review of the specified units will be performed during review of the pending CAAPP application submitted for these units.

It should be noted that this permit has been revised to include operation of the equipment described in Construction permit 98090040.

Please note the Permittee should update their CAAPP application to include this equipment modification by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information.

If you have any questions concerning this letter, please contact Bruce Rodely at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BDR:jar

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Company
Attn: Richard Fentem
321 East North Street
Danville, IL 61832

Application No.: 96010107
Applicant's Designation: SO 151-01
I.D. No.: 183020ABT
Date Received: January 26, 1996
Subject: Corn Mill Modification
Date Issued: April 10, 1996
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of corn mill modification with related equipment and three baghouses as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon modifying the corn milling operation by adding related equipment and increasing milling capacity to 100,000 bu/day.

2. Emissions and operation of equipment shall not exceed the following limits:

Bagfilters	Operating Hours (Hour/Year)	Process Rate (Tons/Hour)	Particulate Matter Emissions (Lb/Hour)	(Tons/Year)
115-02, 03, 04	8112	420	2.6	10.5

These limits are based on the information provided in the permit application.

3. For the corn mill production the Permittee shall keep records of the following items and such other items as may be appropriate in order that compliance with the requirements of Condition 2 may be verified.

a. Maintain operating and maintenance records for the baghouse control system.

b. Amount of corn milled on a monthly basis.

These records required by the permit shall be retained for at least three years. These records shall be available for inspection upon request by the Agency.

If you have any questions on this, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:drk

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Richard E. Fentem
321 East North Street
Danville, Illinois 61832

Application No.: 97030149
Applicant's Designation:
Subject: Soy Hull Pelletizing
Date Issued: May 14, 1997
Location: 321 East North Street, Danville

I.D. No.: 183020ABT
Date Received: March 28, 1997

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of soy hull pelletizing with cyclone control as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Process Rate (Lbs/Hr)	Operating Hours (Hr/Yr)	Particulate Matter Emissions (Lbs/Hr)	(T/Yr)
Soy Hull Pelletizing 201-19	32,000	8,568	3.4	14.7

These limits are based on information provided in the application. Compliance with annual limits shall be determined from a running total of 12 months of data.

2a. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Agency to review compliance with Condition 1.

i. Operating hours for each emission source.

ii. Amount of soy hull pelletizing processed on a monthly basis.

iii. Operating parameters for air pollution equipment.

b. These records shall be retained for two years and shall be available for inspection and copying by the Agency.

3a. Within 90 days of written request from the Agency, the particulate matter emissions of one of the soy hull pelletizing cyclone shall be measured by an approved testing service, during conditions which are representative of maximum emissions.

b. The Agency shall be notified in writing a minimum of thirty (30) days prior to the expected date of these tests and further notified a minimum of five (5) working days prior to the test of the exact date, time and place of these tests, to enable the Agency to witness these tests.

c. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Agency: Refer to 40 CFR 60, Appendix A USEPA test methods.

Location of Sample Points	USEPA Method 1 (40 CFR 60, Appendix A)
Gas Flow and Velocity	USEPA Method 2 (40 CFR 60, Appendix A)
Particulate Matter	USEPA Method 5 (40 CFR 60, Appendix A)
PM10	USEPA Method 201 or 102A (40 CFR 51, Appendix M)

d. Copies of the Final Report(s) for these tests shall be submitted to the Agency within 14 days after the test results are compiled and finalized. The Final Report shall include as a minimum the following:

i. A summary of results

ii. General information

iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule

iv. Detailed description of test conditions, including

A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption

B. Control equipment information, i.e., equipment condition and operating parameters during testing, and

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration

e. Submittals of information shall be made as follows:

i. Two copies of all notifications, reports or other submissions required by this permit shall be provided to the Agency at the following address, unless otherwise specified:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
1340 North Ninth Street
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. One copy of all notifications, reports and other submissions required by this permit, but not including the Annual Emission

Report, shall also be provided to the Agency at the following address, unless otherwise specified:

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
2009 Mall Street
Collinsville, Illinois 62234

If you have any questions on this, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DMH:jar

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Richard E. Fentem
321 East North Street
Danville, Illinois 61834

Application No.: 97100053 I.D. No.: 183020ABT
Applicant's Designation: S.O. 301-06 Date Received: October 17, 1997
Subject: General Aspiration for Transfer System
Date Issued: January 13, 1998
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of baghouse on soybean meal and corn transfer system as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Operating Hours (Hr/Yr)	Particulate Matter Emissions (Lb/Hr)	(Ton/Yr)
Soybean Meal and Corn Transfer Baghouse	8,760	0.4	1.75

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

If you have any questions on this, please call Bruce Rodely at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BDR:jar

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
Attn: Richard E. Fentem
321 East North Street
Danville, Illinois 61834

Application No: 98090040 I.D. No.: 183020ABT
Applicant's Designation: S.O. F-108 Date Received: September 14, 1998
Subject: Cogen Coal Handling Dust Collector
Date Issued: December 1, 1998
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of coal dust collection system on the existing coal transfer system as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Operating Hours (Hour/Year)	Particulate Matter Emissions (Lb/Hour)	(Ton/Year)
F-108 Coal Handling Dust Collector	8,760	1.0	4.38

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

2. This permit is issued based upon adding the coal dust collection system on the existing coal transfer system, which results in a reduction of particulate matter emissions.

If you have any questions concerning this letter, please contact Bruce Rodely at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BDR:jar

cc: Region 3

217/782-2113

REVISED
JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Bunge Grain Milling LLC
Attn: David McDermott
321 East North Street
Danville, Illinois 61832

Application No.: 98100070
Applicant's Designation: SO 115-05
Subject: Bldg. 115 Vacuum System
Date Issued: January 19, 1999

I.D. No.: 183020ABT
Date Received: October 22, 1998

Operating Permit Expiration Date: December 31, 2002

Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of the Building 115 vacuum system, including filter dust collector, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation of the emission source(s) included in this permit shall not begin until all associated air pollution control equipment has been constructed and is operational.

2. This permit is issued based on this new vacuum system having negligible emissions. For this purpose, emissions of particulate matter shall not exceed 0.1 lb/hour and 0.44 ton/year.

If you have any questions on this permit, please call Christopher Romaine at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:CPR:psj

cc: Region 2

217/782-2113

OPERATING PERMIT -- REVISED

PERMITTEE

Bunge Grain Milling, Inc.
Attn: David McDermont
321 East North Street
Danville, Illinois 61832

Application No.: 99010073 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 17, 2001
Subject: Truck Dump Pit #4 and 24 Soy Meal Storage Bins
Date Issued: January 15, 2002 Expiration Date: December 3, 2006
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a Truck Dump Pit #4 and associated conveyors controlled by the existing Baghouse 301-04, 24 soy meal storage bins and associated conveyors controlled by existing Baghouse 234-01 and 234-02 as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. i. The Truck Dump Pit #4 is subject to a New Source Performance Standard (NSPS), Standards of Performance for Grain Elevators, 40 CFR 60, Subparts DD. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

ii. A. Process emission of particulate matter (PM) from the Truck Dump Pit #4 including the baghouse filter shall not exceed 0.01 gr/dscf, as required by 40 CFR 60.302(b)(1).

B. Process emission of PM from the Truck Dump Pit #4 including the baghouse filter shall not exhibits opacity greater than 0 percent, as required by 40 CFR 60.302(b)(2).

iii. Fugitive PM emission from the Truck Dump Pit #4 shall not exhibits opacity greater than 5 percent opacity, as required by 40 CFR 60.302(c)(1).

b. Emissions of PM from the Truck Dump Pit #4, which is controlled by a baghouse (301-04) shall not exceed 0.61 lb/hr and 2.69 tons/year.

c. The Permittee shall keep the following records for the Truck Dump Pit #4:

i. Throughput of the Truck Dump Pit #4 in tons/year; and

ii. The annual PM emissions based on the throughput and the applicable emission factors and formulas with supporting calculations.

d. Upon written request from the Illinois EPA, PM emissions and opacity levels from the Truck Dump Pit #4 controlled by the Baghouse 301-04, shall be measured in accordance with 40 CFR 60.303.

2a. i. The 24 soy meal storage bins are subject to 35 IAC 212.123, which provides that the Permittee shall not cause or allow the emission of smoke or other PM, with opacity greater than 30 percent.

ii. The 24 soy meal storage bins are subject to 35 IAC 212.321(a), which provides that particulate matter (PM) emissions shall not exceed the allowable emission rate specified in 35 IAC 212.321(c).

iii. Fugitive PM emission from the 24 soy meal storage bins are subject to 35 IAC 212.301, which provides that the Permittee shall not cause or allow PM fugitive emission from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

b. The only material stored in the 24 storage bins shall be soy meal. Grain as defined in 40 CFR 60.301(a) shall not be stored in these bins.

c. This permit is issue based on no increase in emissions. The 24 soy meal storage bins increase storage capacity, without increase in meal throughput or transfer rate.

3. At all times, the Permittee shall, maintain and operate the Truck Dump Pit #4 and the 24 soy meal storage bins, conveyors and associated control equipments, in a manner consistent with good air pollution control practice for minimizing emissions.

4. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

5. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

6. Two copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
Telephone: 217/782-5811 Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
Telephone: 618/346-5120 Facsimile: 618/346-5155

7. This permit does not revise or relax any requirements contained in the Operating Permit 72120886 and 72121263, for the existing baghouses controlling the Truck Dump Pit #4 and the 24 soy meal storage bins, respectively, including any associated requirements for monitoring, recordkeeping or reporting.

The Permittee should update their CAAPP application to include this new equipment by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information to accomplish this.

This permit has been revised to clarify Condition 1(a)(iii) and 2(c).

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RNG:jar

cc: Region 3

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

Bunge Milling Inc.
Attn: Mickey Lay
321 East North Street
Danville, Illinois 61832

Application No.: 99100012 I.D. No.: 183020ABT
Applicant's Designation: S.O. 115-06 Date Received: May 6, 2003
Subject: Tail Stock Dryer
Date Issued: July 21, 2003 Expiration Date: October 1, 2007
Location: 321 East North Street, Danville

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of an expansion of the dry corn mill, including a new tail stock dryer controlled by baghouse 115-04 and additional grain handling and process equipments controlled by baghouses and other control as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This federally enforceable state operating permit is issued to limit the increase in emissions from the expansion of the dry corn mill to less than major modification thresholds i.e., 25 tons/year of particulate matter (PM) and 15 tons/year of particulate matter less than 10 microns (PM_{10}). As a result the expansion of the corn mill process is not a major modification. The change in emissions, as limited by the conditions of this permit, is described in Attachments A and B.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

2a. The dry corn mill is subject to 35 IAC 212.321, which provides that the emission of particulate matter (PM) into the atmosphere in any one hour period from any process emission unit or group of similar emission units shall not exceed the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321 (a)]. For the purpose of applying this emission standard, all emission units controlled by a common control device shall be considered similar emission units.

b. The dry corn mill is subject to 35 IAC 212.123(a), which provides that the Permittee shall not cause or allow the emission of smoke or other PM, with an opacity greater than 30 percent into the atmosphere from any emission unit.

c. The dry corn mill is subject to 35 IAC 212.301, which provides that the emissions of fugitive particulate matter from any emission unit, including material handling or storage activity, shall not be visible

by an observer looking general toward the zenith at a point beyond property line of the source.

3. The throughput of the dry corn mill shall not exceed 100,000 bushels/day, monthly average.

4a. i. The tail stock dryer shall only be heated by steam and shall not be equipped with direct-fired fuel burners.

ii. Emissions of PM and PM_{10} from the thru stock and tail stock dryer and other units controlled by baghouse 115-04 combined shall not exceed 1.24 lb/hr and 5.4 tons/year.

b. i. Emissions of PM and PM_{10} from emission units other than the tail stock dryer shall be controlled with fabric filter to comply with the following emission rates based on the type of unit:

Pollutant	Whole Corn (Elevators)	Whole Corn (Mill)	Bran	Milled Corn
PM (gr/dscf)	0.002	0.001	0.00042	0.00047
PM_{10} (gr/dscf)	0.002	0.001	0.00073	0.00067

ii. Emissions of PM and PM_{10} from other emission units in the dry corn mill shall not exceed the applicable limits in Attachment A and B.

c. These Conditions in this permit are intended to assure that the increase in emissions from expansion of the dry corn mill is not significant pursuant to the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

5. At all times, the Permittee shall, maintain and operate emission units in the dry corn mill, including associated control devices, in a manner consistent with good air pollution control practice for minimizing emissions.

6. This permit does not revise or relax any other requirements contained in the Operating Permit 72121261 for the existing units in the Corn Processing Operations including any associated requirements for monitoring, recordkeeping or reporting.

7a. Upon written request from the Illinois EPA, the Permittee shall at his own expense, conduct test for PM and PM_{10} emission and opacity in accordance with the applicable test methods and procedures as identified below.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter (PM)	USEPA Method 5
Particulate Matter (PM_{10})	USEPA Method 201A and 202
Opacity	USEPA Method 9

b. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.

c. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:

   i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

   ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.

   iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.

   iv. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods.

   v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.

d. Copies of the Final Reports(s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized. The Final Report shall include as a minimum:

   i. A summary of results.

   ii. General information.

   iii. Description of test method(s), including description of sample points sampling train, analysis equipment, and test schedule.

   iv. Detailed description of test conditions, including:

      A. Process information, e.g., equipment feed rate.

      B. Control equipment information, i.e., equipment condition and operating parameters during testing.

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

8a. The Permittee shall keep the following operation records for the dry corn mill:

i. Throughput (bushels/day monthly average) based upon the daily corn mill production input.

b. The Permittee shall keep an inspection and maintenance log for the tail stock dryer and associated control system;

c. The Permittee shall keep the following records related to emissions:

i. The maximum emission of PM and PM_{10} (pound/hour) from each emission unit or group of emission units controlled by a single control device, considering maximum exhaust flow and nominal exhaust loading, with supporting documentation.

ii. An estimate of excess PM and PM_{10} emissions from each incident when a unit did not comply with the limits required in this permit;

ii. Annual PM and PM_{10} emission based on the throughput and the applicable emission factors and formulas with supporting calculations.

9. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

10. If there is an exceedance of the requirements of this permit as determined by the records required by this permit or by other means, the Permittee shall submit a report to the Illinois EPA's within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

11. Two copies of required reports and notifications concerning emissions equipment operation or performance testing shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
Telephone: 217/782-5811 Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
Telephone: 618/346-5120 Facsimile: 618/346-5155

Please note that this Federally Enforceable State Operating Permit has been revised to address the replacement of cyclones 115-06 with the baghouse 115-04, pursuant to Construction Permit 02080017, with an accompanying decrease in particulate matter emissions.

The Permittee should update their CAAPP application to include this change at the source by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information to accomplish this.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RNG:jar

cc: Illinois EPA, FOS Region 3
Illinois EPA, Compliance Section
Lotus Notes

ATTACHMENT A
CHANGE IN PM EMISSIONS LIMITATIONS

Emission Units[1]	Hourly Limit (Lb/Hr)	Annual[2] Limit (Tons/Yr)
Elevator		
West Headhouse Gallery Vacuum	0.009	0.038
Track six at Grade Vacuum	0.009	0.038
301-01	0.943	4.130
301-02	0.316	1.384
301-04	0.614	2.691
304-02	0.461	2.019
Corn Mill House Vacuum		
104-01	0.006	0.026
105-03	0.006	0.026
Cleaning		
110-08	0.016	0.071
110-09	0.351	1.539
115-02	0.492	2.154
Corn Mill Preparation		
101-01	0.145	0.635
101-02	0.121	0.529
103-04	0.040	0.176
103-05	(Discharge to 101-02)	
105-04	0.280	1.226
105-06	0.121	0.529
115-03	0.162	0.710
115-04	1.24	5.4
115-05	0.003	0.015
115-06	Eliminated Pursuant to Construction Permit 02080017	
Corn Milling		
101-04	0.151	0.662
101-05	0.088	0.385
103-04	(See Corn Mill Preparation)	
103-05	(See Corn Mill Preparation)	
105-04	(See Corn Mill Preparation)	
105-05	0.169	0.741
105-06	(See Corn Mill Preparation)	
109-01	0.054	0.235
109-02	0.052	0.229

Emission Units[1]	Hourly Limit (Tons/Yr)	Annual[2] Limit (Tons/Yr)
Bran Milling		
101-01		(See Corn Mill Preparation
103-06	0.004	0.015
109-03	0.022	0.098
109-04	0.008	0.035
Bins		
104-02	0.145	0.635
105-06		(See Corn Mill Preparation)
Packing and Loading		
103-06		(See Bran Milling)
104-02		(See Bins)
105-10	0	0
110-04	0.007	0.029
110-05	0.014	0.060
110-07	0.018	0.078
111-34	0.005	0.022
115-01	0.181	0.794
Reprocessing		
112-31	0.145	0.635
Totals	6.43	28.0

ATTACHMENT B
CHANGE IN PM_{10} EMISSIONS

Emission Units[1]	Hourly Limit (Lb/Hr)	Annual[2] Limit (Tons/Yr)
Elevator		
West Headhouse Gallery Vacuum	0.009	0.038
Track six at Grade Vacuum	0.009	0.038
301-01	0.943	4.130
301-02	0.316	1.384
301-04	0.614	2.691
304-02	0.461	2.019
Corn Mill House Vacuum		
104-01	0.009	0.038
105-03	0.009	0.038
Cleaning		
110-08	0.016	0.071
110-09	0.351	1.539
115-02	0.492	2.154
Corn Mill Preparation		
101-01	0.207	0.906
101-02	0.172	0.755
103-04	0.057	0.252
103-05	(Discharge to 101-02)	
105-04	0.399	1.748
105-06	0.172	0.755
115-03	0.282	1.234
115-04	1.24	5.4
115-05	0.005	0.021
115-06	Eliminated Pursuant to Construction Permit 02080017	
Corn Milling		
101-04	0.215	0.943
101-05	0.125	0.549
103-04	(See Corn Mil Preparation)	
103-05	(See Corn Mil Preparation)	
105-04	(See Corn Mil Preparation)	
105-05	0.241	1.056
105-06		
109-01	0.076	0.334
109-02	0.075	0.327

Emission Units[1]	Hourly Limit (Lb/Hr)	New Annual[2] Limit (Tons/Yr)
Bran Milling		
101-01	(See Corn Mill Preparation)	
103-06	0.006	0.027
109-03	0.039	0.170
109-04	0.014	0.060
Bins		
104-02	0.207	0.906
105-06	(See Corn Mill Preparation)	
Packing and Loading		
103-06	(See Bran Milling)	
104-02	(See Bins)	
105-10	0	0
110-04	0.010	0.042
110-05	0.020	0.086
110-07	0.025	0.111
111-34	0.007	0.031
115-01	0.258	1.132
Reprocessing		
112-31	0.207	0.906
Totals	7.3	31.8

Notes: [1] Emission units are grouped by their associated control system The identity of the emission units controlled by each control system is provided in the cross referenced table included in the application.

[2] New Annual limits are based on maximum hours of operation and nominal exhaust grain loading.

RNG:99010012:jar

10.5 Attachment 5 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.6 Attachment 6 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;

2. Minor Permit Modification; and

3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment

   - Corrects typographical errors;
   - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
   - Requires more frequent monitoring or reporting by the Permittee;
   - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
   - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.

2. Minor Permit Modification

   - Do not violate any applicable requirement;
   - Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;

- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

    - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and

    - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.

- Are not modifications under any provision of Title I of the CAA;

- Are not required to be processed as a significant permit modification; and

- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

- The source's suggested draft permit/conditions;

- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.

10.7 Attachment 7 Form 199-CAAPP, Application For Construction Permit (For CAAPP Sources Only)

Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	I.D. number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information

1.	Source name:		
2.	Source street address:		
3.	City:		4. Zip code:
5.	Is the source located within city limits?		☐ Yes ☐ No
6.	Township name:	7. County:	8. I.D. number:

Owner Information

9.	Name:		
10.	Address:		
11.	City:	12. State:	13. Zip code:

Operator Information (if different from owner)

14.	Name		
15.	Address:		
16.	City:	17. State:	18. Zip code:

Applicant Information

19.	Who is the applicant? ☐ Owner ☐ Operator	20. All correspondence to: (check one) ☐ Owner ☐ Operator ☐ Source
21.	Attention name and/or title for written correspondence:	
22.	Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents		
24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	☐ Yes ☐ No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	☐ Yes ☐ No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	☐ Yes ☐ No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	☐ Yes ☐ No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	☐ Yes ☐ No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	☐ Yes ☐ No ☐ Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block	
This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30.	I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature: BY: _____ AUTHORIZED SIGNATURE _____ TITLE OF SIGNATORY _____ TYPED OR PRINTED NAME OF SIGNATORY _____/_____/_____ DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.8 Attachment 8 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.

2. A completed compliance certification for the source. For this purpose, the Illinois EPA will accept a copy of the most recent form 401-CAAPP, ANNUAL COMPLIANCE CERTIFICATION submitted to the Illinois EPA.

3. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.

4. Information addressing any outstanding transfer agreement pursuant to the ERMS.

5. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

   b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.html.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

LAK:psj

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Bunge Milling, Inc.
Attn: James M. Lay
321 East North Street
Danville, Illinois 61832

Application No.: 04070017
I.D. No.: 183020ABT
Applicant's Designation:
Date Received: July 9, 2004
Subject: Hexane Storage Tanks
Date Issued: August 6, 2004
Location: 321 East North Street, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of conversion of three existing propane storage tanks into hexane storage tanks, with control by the existing solvent reclaim system as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit authorizes the Permittee to convert three existing pressure tanks for propane storage (#5, #6 and #7) into hexane storage tanks (#4A, #5A and #6A) venting through a condenser and mineral oil absorber system in the existing solvent reclaim system.

b. This permit is issued based on no change in hexane usage by the extraction process as a result of the additional hexane storage capacity.

2. The Permittee shall follow good operating practices for the hexane storage tanks and associated control system, including periodic inspections, maintenance and prompt repair of defects.

3. Emissions of volatile organic material(VOM) from each hexane storage tank are minimal. For this purpose minimal emissions shall not exceed 0.5 tons/month and 1.2 tons/year.

4. This permit does not revise or relax any requirements contained in the CAAPP permit for the oil extraction process, including associated requirements for monitoring, recordkeeping or reporting.

5. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

6. If there is an exceedance of the requirements of this permit as determined by the records required by this permit or by other means, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a descript ion of the exceedance or violation and efforts to reduce emissions and future occurrences.

7. Two copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

Telephone: 217/782-5811 Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

Telephone: 618/346-5120 Facsimile: 618/346-5155

8. The Permittee is allowed to operate the converted hexane tanks under this construction permit until its CAAPP Permit is next reissued.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RNG:jar

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Bunge Milling, Inc.
Attn: James M. Lay
321 East North Street
Danville, Illinois 61832

Application No.: 04080007 I.D. No.: 183020ABT
Applicant's Designation: Date Received: August 4, 2004
Subject: LTMS System Grain Receiving, Handling and Loadout
Date Issued: September 10, 2004
Location: 321 East North Streets, Danville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of operation to handle grain in the existing Long Term Meal System (LTMS), which is controlled by two existing fabric filters, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit authorizes the Permittee to handle grain in the existing LTMS, including receiving grain from either hopper rail cars or hopper trucks in the existing dump pit, handling and storage of grain, and truck loadout of grain.

b. This permit is issued based on no increase in grain processing capacity of the plant. In this regard, this permit does not authorize transfer of grain directly to the processing operations, that is, grain stored at the LTMS will be loaded out by trucks and received at the main elevator.

2a. The existing LTMS receiving, handling and loadout is subject to 35 IAC 212.321(a), which provides that, no person shall cause or allow the emission of particulate matter (PM) into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) [35 IAC 212.321(a)].

b. As the LTMS receives, handles and loads out grain, the LTMS is subject to requirements of 35 IAC Part 212, Subpart S, including:

i. Requirements related to implementation of a housekeeping checklist (35 IAC 212.461(b)).

ii. Requirements related to control of PM emissions from internal transfer (35 IAC 212.462(c)).

iii. Requirements related to control of PM emissions from loadout areas (35 IAC 212.462(d)).

Note: Requirements related to control of PM emissions from dump-pit areas at 35 IAC 212.462(b) are not applicable provided that the receiving activity does not qualify as a "major dump-pit area."

3a. The LTMS will become subject to the New Source Performance Standard (NSPS) 40 CFR Subpart DD, Standards of Performance for Grain Elevators when it initially receives grain, because the LTMS was constructed after August 3, 1978. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.

b. Thereafter, the various operations at the LTMS shall comply with the standards of the NSPS 40 CFR 60.302(b), as follow:

i. Process emission shall not contain particulate matter (PM) in excess of 0.023 g/dscm (0.01 gr/dscf) and shall exhibit greater than 0 percent opacity.

ii. The opacity of fugitive emissions shall not exceed:

A. 5 percent from any individual truck or railcar unloading station.

B. 0 percent from any grain handling operation.

C. 10 percent from any truck loading station.

c. The Permittee shall follow good operating practices for the LTMS receiving, handling and loadout operations and associated control systems, including periodic inspections, maintenance and prompt repair of defects.

4a. The LTMS shall not receive more than 75,000 tons of grain in any 12-month period.

b. Emissions of particulate matter (PM/PM_{10}) from grain receiving, handling and loadout operations at the LTMS shall not exceed 0.2 tons/month and 2.6 tons/year. These limits are based on maximum of 75,000 tons of grain handled per any 12-month period at LTMS.

5. In a timely manner following the initial handling of grain at the LTMS, the Permittee shall have the opacity and PM emissions of the LTMS receiving, handling and loadout and associated air pollution control equipment tested in accordance with the applicable testing requirements in the NSPS 40 CFR 60.303.

6. This permit does not revise or relax any requirements contained in the CAAPP permit for the LTMS receiving, handling and loadout operations, including associated requirements for monitoring, recordkeeping or reporting.

7a. The Permittee shall keep a record of the amount of grain received by the LTMS (tons;/month and tons/year).

b. The Permittee shall keep record of the emissions of PM and PM_{10} from the LTMS grain receiving, handling and loadout operations, with supporting calculations.

8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

9. If there is an exceedance of the requirements of this permit as determined by the records required by this permit or by other means, the Permittee shall submit a report to the Illinois EPA within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

10. Two copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

    Illinois Environmental Protection Agency
    Division of Air Pollution Control
    Compliance Section (#40)
    P.O. Box 19276
    Springfield, Illinois 62794-9276

    Telephone: 217/782-5811 Facsimile: 217/524-4710

    and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

    Illinois Environmental Protection Agency
    Division of Air Pollution Control
    2009 Mall Street
    Collinsville, Illinois 62234

    Telephone: 618/346-5120 Facsimile: 618/346-5155

11. The Permittee is allowed to receive, handle and loadout grain at the LTMS under this construction permit until its CAAPP Permit is next reissued.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RNG:jar

cc: Region 3

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

P.O. BOX 19506, SPRINGFIELD, ILLINOIS 62794-9506

RENEE CIPRIANO, DIRECTOR

217/782-2113

"REVISED"
TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

Bunge Milling, Inc.
Attn: Russ Lazzell, Manager of Safety and Environment
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: February 7, 1996
Operation of: Corn and Soybean Processing
Date Issued: November 24, 2003 Expiration Date: November 24, 2008
Source Location: 321 East North St., Danville, IL, Vermillion, 61832
Responsible Official: Fred Luckey, Sr. Vice President, General Manager

This permit is hereby granted to the above-designated Permittee to operate a facility that processes corn and soybeans, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: December 8, 2003
Revision Date Issued: December 6, 2004
Purpose of Revision: Administrative Amendment

This administrative amendment includes a change in the operator to Russ Lazzell, Management of Safety and Environment. The other changes included typographical errors. Because the changes in the permit were only administrative, no formal public notice was issued.

This document only contains those portions of the entire CAAPP permit that have been revised as a result of this permitting action. If a conflict exists between this document and previous versions of the CAAPP permit, this document supercedes those terms and conditions of the permit for which the conflict exists. The previous permit issued November 24, 2003 is incorporated herein by reference.

Please attach a copy of this amendment and the following revised pages to the front of the most recently issued entire permit.

If you have any questions concerning this permit, please contact LeeAnne Kinsella at 217/782-2113.

DES

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:LAK:jar

COPY
Original Signed by
Donald E. Sutton, P.E.

cc: Illinois EPA, FOS Region 3

[1] This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

[2] Except as provided in Condition 8.7 of this permit.

1.0 SOURCE IDENTIFICATION

1.1 Source

Bunge Milling, Inc.
321 East North Street
Danville, Illinois 61832
217/442-1800 Ext. 784

I.D. No.: 183020ABT
Standard Industrial Classification: 2075, Soybean Oil Mills
2041, Flour & Other Grain Mill Products

1.2 Owner/Parent Company

Bunge Milling, Inc.
321 East North Street
Danville, Illinois 61832

1.3 Operator

Bunge Milling, Inc.
321 East North Street
Danville, Illinois 61832

Russ Lazzell, Manager of Safety and Environment
217/442-1800 Ext. 784

1.4 General Source Description

Bunge Milling, Inc. is located at 321 East North Street, Danville, Illinois. The source owns and operates a corn and soybean processing facility, which produces corn and soybean oil and corn and soybean meal and other products.

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):			
5012-0001-0016	TRUCK DUMP #1	Pre 1978	APM 40072.10
5012-0002-0012	NORTH ST TRUCK DUMP #2	Pre 1970	DD 484RF12
5012-0007-0015	SCTN D & E TRANS GEN ASP	Pre 1978	APM 40192.10
5012-0010-0054	HOFFMAN BLDG 301 VAC	Pre 1970	HOFFMAN 48X96
5012-0005-0029	WEST HDHS TRANS GEN ASP	Pre 1978	DD 484RF12
5012-0003-0013	RHOMBO TRUCK DUMP #3	1973	APM SJL156-6
5012-0004-0016	RAIL DUMP	Pre 1978	APM 41120.12
5012-0009-0009	RHOMBO WEST GEN ASP	1973	APM SJL72-6
5012-0003-0018	RHOMBO GALLERY GEN ASP	1973	APM SJL72-6
5012-0010-0047	TRACK 6 VACUUM	Pre 1970	HOFFMAN 48X96
4870-0013-0015	CLEANINGS DISCHARGE	Pre 1978	BUHLER 16S-6-30
4750-0029-0015	CONVEYING GEN ASP	Pre 1970	MICROPUL 100S-6-20
4750-0038-0003	E-W DRYER	1991	DUCON MICROPUL CYCLONE 890/810/13585.5
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):			
4870-0013-0001	CLEANING NORTH APM	1996	APM 41216.12
4880-0034-0069	CORN CLEANING BLDG 115 #2	1996	TD 484RF12
5012-0005-0021	TRUCK DUMP #4 & W. GAL GEN ASP	1985	DD 484RF12
Dry Corn Milling, Processing and Products Handling:			
4870-0010-0055	BEMIS BAGGING	1996	APM 16019.8
4870-0010-0030	BAGGING GEN ASP	1996	APM 40020.8
4870-0013-0019	BAGGING PACKER GEN ASP	1996	APM 14042.8
4880-0042-0057	BRAN DRYER PROCESS	1996	APM 14036.8
4880-0042-0062	BRAN SIFTER PROCESS	1996	APM 10144.8

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4880-0034-0054	EAST MEAL DRY/COOL	1996	APM 40120.10
4880-0034-0059	WEST MEAL DRY	1996	APM 40144.8
4880-0034-0035	S APM BINNING	1996	APM 41144.12
4880-0034-0027	8TH FR DRACCO SCREENING	1996	DRACO 6MB-60
4880-0034-0001	9TH FR DRACCO SCREENING	1996	DRACO 8MB-72
4880-0032-0052	BLDG 105 VACUUM	1996	HOFFMAN 36X96
4870-0021-0001	BULK LOADING WHITE GOODS	1996	DD 484RF12
4870-0015-0016	BLDG 104 VACUUM	1996	HOFFMAN 38405A
4880-0042-0054	BRAN BIN	1996	BUHLER 16S-6-30
4880-0008-0028	6TH FLR SCREENING	1996	WIEDENMANN 2X4 LF150-1200
4880-0008-0040	W 4TH FLR GRAVITY TABLES	1996	WIEDENMANN 2X5 LF225-2250
4880-0034-0010	S LUNCHROOM SCREENING	1996	CD 484RF12
4880-0034-0042	S CD SCREENING	1996	CD 484RF12
4880-0034-0048	N CD GEN ASPIRATION	1996	CD 484RF12
4880-0034-0019	N LUNCHROOM SCREENING	1996	CD 484RF12
4870-0013-0024	PACK & BULK LOAD BLDG 115 #1	1996	TD 484RF12
4880-0034-0077	CAMAS/BRAN BLDG 115 #3	1996	TD 484RF12
4880-0034-0071	THRU/TAIL STOCK DRYERS BLDG 115 #4	1996	TD 484RF12
4880-0032-0070	BLDG 115 VACUUM	1996	HOFFMAN S54002
4870-0005-0003	TRACK 2 UNLOADING SEC REC	1996	USS INC. 15CF P/D
4880-0009-0005	GERM FILTER	Pre 1970	APM 16030.4
4932-0001-0001	LAB FILTER	Pre 1970	APM 14106.4
4900-0003-0039	AB FIN PROD SURGE NORTH	1996	MICROPUL 8B
4900-0003-0045	AB FIN PROD SURGE SOUTH	1996	MICROPUL 8B

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4990-0005-0012	1/2 PULVOCRON MEAL REC	1996	BUHLER 9-6-100
4990-0005-0042	1/2 PULVOCRON VISC FLOUR REC	1996	BUHLER 16-8-100
4990-0002-0010	3/4 PULVOCRON MEAL REC	1996	BUHLER 9-6-100
4990-0004-0013	9/10 PULV MEAL SEC REC	1996	BUHLER 16009.4
4990-0003-0010	7/8 PULV MEAL SEC REC	1996	BUHLER 16009.4
4990-0002-0019	#3 PULVOCRON	1996	BUHLER 37-8-220
4990-0002-0022	#4 PULVOCRON	1996	BUHLER 37-8-220
4900-0001-0039	#5 PULVOCRON	1996	BUHLER 37-8-220
4990-0005-0021	#1 PULVOCRON	1996	BUHLER 37-8-220
4990-0005-0024	#2 PULVOCRON	1996	BUHLER 37-8-220
4990-0003-0019	#7 PULVOCRON	1996	APM 16022.8
4990-0003-0022	#8 PULVOCRON	1996	APM 16022.8
4990-0004-0022	#9 PULVOCRON	1996	APM 16022.8
4990-0004-0025	#10 PULVOCRON	1996	APM 16022.8
4990-0002-0008	3/4 PULV GRINDER SURGE	1996	MICROPUL 2 1/2B
4990-0005-0010	1/2 PULV GRINDER SURGE	1996	MICROPUL 2 1/2B
4990-0004-0011	9/10 PULV GRINDER SURGE	1996	APM 16104.4
4990-0003-0008	7/8 PULV GRINDER SURGE	1996	APM 16104.4
4990-0005-0028	1/2 FLOUR SURGE BIN	1996	MICROPUL 2 1/2B
4990-0002-0026	3/4 FLOUR SURGE BIN	1996	MICROPUL 2 1/2B
4990-0003-0026	7/8 FLOUR SURGE BIN	1996	APM 16104.4
4990-0004-0029	9/10 FLOUR SURGE BIN	1996	APM 16104.4
4990-0006-0024	HIBOND VISC FLAKE ROLLER MILL	1996	APM 15066.8
4820-0001-0029	CSM BLENDED FOOD REC	1996	APM 40070.7

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4820-0001-0052	BLENDED FOOD PACK	1996	APM 16150.6
4900-0001-0068	ALLBOND VISC FLOUR GEN ASP	1996	BUHLER 16-8-100
4820-0003-0007	MILK BINS	1996	MICROPUL 6B
4990-0007-0049	300 SERIES BINNING	1996	MICROPUL 1F1
4990-0001-0002	SOY MEAL GEN ASP	1996	APM 16022.4
4990-0001-0006	SOY MEAL SURGE	1996	MICROPUL 6B
4990-0001-0025	MEAL BIN COOLER	1996	APM 400072.10
4990-0002-0043	3/4 SOY FLOUR REC	1996	APM16014.8
4820-0003-0072	TRI CAL BINS	1996	APM 16009.8
4900-0001-0058	5/6 ALLOND REC	1996	APM 16014.8
4990-0003-0032	7/8 SOY FLOUR REC	1996	APM 16014.8
4990-0002-0033	BIN 308	1996	MICROPUL 6B
4820-0002-0072	BIN 509	1996	MICROPUL 6B
4820-0002-0068	BIN 508	1996	MICROPUL 6B
4820-0003-0038	BIN 310	1996	MICROPUL 6B
4990-0002-0036	BIN 309	1996	MICROPUL 6B
4990-0004-0037	9/10 PULVICRON REC	1996	BUHLER 16-6-220
4820-0002-0038	MILK BINS	1996	MICROPUL 21-6-220
4820-0002-0035	MILK BIN BAG DUMP	1996	APM 14048.6
4990-0007-0029	BLENDING BATCH BIN GEN ASP	1996	BUHLER 25S-6-30
4990-0007-0036	BLENDER GEN ASP	1996	BUHLER 16S-6-30
4990-0007-0032	BLENDING GEN ASP	1996	MICROPUL 36S-8-30
4820-0003-0063	CSB BINNING GEN ASP	1996	BUHLER 64S-6-20
4820-0003-0059	CSB BINNING GEN ASP	1996	BUHLER 64S-6-20

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4990-0006-0040	GEN ASPIRATION	1996	BUHLER 9-8-220
4900-0001-0091	#5 SL GEN ASP & #5 EXPANDER	1996	APM 14024.6
4990-0011-0001	FIBER REC GEN ASP	1996	BUHLER 9-8-220
4820-0002-0011	PCM ASPIRATION FILTER	1996	MICROPUL 1F1
4870-0010-0005	CF BRAN PACKING BINNING	1996	MICROPUL 25-8-220
4900-0005-0035	BLDG 111 VACUUM	1996	HOFFMAN 60X120
4870-0006-0006	110/210 REC GEN ASP	1996	APM 16030.4
4990-0011-0029	FIBER REC GEN ASP	1996	APM 16019.4
4990-0001-0029	COOLING TOWER	1996	APM 40072.10
4820-0003-0022	INGREDIENT BIN 601	1996	MICROPUL 4B
4820-0003-0026	INGREDIENT BIN 602	1996	MICROPUL 4B
4820-0003-0030	INGREDIENT BIN 603	1996	MICROPUL 2 1/2 B
4820-0003-0034	INGREDIENT BIN 604	1996	APM 15105.4
4820-0003-0018	MICRO INGR DUMP FILTER	1996	APM 15105.4
4820-0003-0004	MIXER GEN ASP	1996	BUHLER 25S-6-30
4900-0001-0065	3/4 HAMMERMILL	1996	APM 16009.6
4900-0001-0006	#3 & #4 EXPANDERS	1996	APM 16009.6
4900-0005-0001	REPROCESS GEN CD ROOF	1996	CD 376RF10
4900-0001-0042	#6 PULV GRINDER	1996	BUHLER 37-8-220
4900-0001-0046	5/6 PULV AB FIN PROD SURGE BIN	1996	MICROPUL 4B
4900-0002-0032	PELLET BINS	1996	BUHLER 16S-6-30
4900-0003-0017	#1 PCM GRIND	1996	APM 16022.8
4900-0003-0020	#2 PCM GRIND	1996	APM 16022.8
4900-0003-0023	#3 PCM GRIND	1996	APM 16022.8

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4900-0003-0026	#4 PCM GRIND	1996	APM 16022.8
4900-0003-0029	#5 PCM GRIND	1996	APM 16022.8
4990-0006-0027	VISCOSITY FLOUR REC	1996	APM 16022.8
4990-0011-0010	COND RECEIVER/SOY MEAL GRIND	1996	APM 16014.8
4900-0005-0007	GRIND REJECT/SCRAP BIN	1996	MICROPUL 2 1/2B
4900-0005-0029	BLDG 112 VACUUM	1996	HOFFMAN 36X96
4900-0005-0006	N DAY GEN ASP & #5 EXPANDER	1996	CD 484RF12
4820-0001-0093	BLENDED FOODS FILTER	1996	DD 124RF10
4900-0001-0030	AB GRINDING SURGE BIN	1996	BUHLER 37-8-220
4912-0002-0054	HOMINY TRUCK LDOUT ASP	Pre 1970	DD 484RF12
4860-0018-0007	N HOMINY FEED	1982	MICROPUL 1F2
4860-0018-0003	S HOMINY FEED	Pre 1970	MICROPUL 1F2
4860-0019-0003	FTS DRYER ASPIRATION	Pre 1970	DAY CYCLONE HV60
4860-0022-0017	SEC CLEAN GRINDING	Pre 1970	APM 15030.8
4860-0024-0003	#1 FTS BRAN DRYER	Pre 1970	CORONA 15 CYCLONE
4912-0006-0017	TRACK 16 BULK RAIL LDOUT	1982	WEIDENMAN LFT 2X7
4860-0017-0073	FLAKING GEN ASP	Pre 1970	APM 40120.8
4860-0017-0003	GERM DRYER	Pre 1970	DAY CYCLONE HV56
4860-0017-0072	GERM ROLLS ASPIRATION	Pre 1970	DAY CYCLONE HV56
4860-0017-0026	BIN 945 GERM RECEIVER	Pre 1970	BUHLER 36S-6-30
4860-0023-0001	GERM DUSTERS ASP	Pre 1970	APM 40120.8
4860-0024-0037	PET BRAN KICE LITES FILTER	1995	MICROPUL 36S-6-30
Corn Oil Solvent Extraction:			
4861-0003-0018	CORN MEAL DC PLANT #2	1982	MAC CYCLONE HV90

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4861-0006-0005	CORN EXTRACTOR, DT and DISTILLATION	1983	MIN OIL ABSORBER
Soybean Preparation:			
4750-0036-0001	E-W BEAN CLEAN/DEHULL	1991	484RF12
4750-0029-0074	HULLS GENERAL ASPIRATION	Pre 1970	DD 276RFW12
4750-0029-0042	6th FLOOR GEN ASP	Pre 1970	MICROPUL 100S-6-20
4750-0017-0043	CONDITIONER	1982	DAY CYCLONE HV51
4750-0017-0044	CONDITIONER	1982	DAY CYCLONE HV51
4750-0018-0043	FLAKER ASPIRATION	1982	DAY CYCLONE HV74
Soybean Oil Solvent Extraction:			
4750-0002-0018	MEAL DRY & COOL CYCLONE #1	1988	DAY CYCLONE HV90
4750-0002-0020	MEAL DRY & COOL CYCLONE #2	1988	DAY CYCLONE HV90
4750-0002-0022	MEAL DRY & COOL CYCLONE #3	1988	DAY CYCLONE HV90
4750-0002-0024	MEAL DRY & COOL CYCLONE #4	1988	DAY CYCLONE HV90
4750-0007-0004	SOY EXTRACTOR, DT & DISTLLATION	1983	MIN OIL ABSORBER
Soybean Products Milling and Handling:			
4750-0029-0032	MEAL BINNING	Pre 1970	APM 40240.8
4750-0029-0045	MEAL SCREENER GEN ASP	Pre 1970	MICROPUL 100S-6-20
4750-0029-0001	MEAL GRIND GEN ASP	Pre 1970	APM 40224.4
4750-0023-0017	KAOLIN/CALCIUM BIN REC	Pre 1970	APM 16050.8
4912-0008-0006	BLDG 201/202 VACUUM	Pre 1970	HOFFMAN 36X96
4912-0009-0005	BLDG 208 VACUUM	Pre 1970	HOFFMAN 36X96
4750-0029-0027	ROUND BIN GEN ASP	Pre 1970	APM 14072.6
4912-0004-0022	TRUCK MEAL LOADOUT	1980	376RF8
4912-0003-0011	RAIL MEAL LOADOUT #1	1981	376RF12
4750-0033-0001	LTMS & RAIL MEAL TRANSFER	1985	376RF8

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4750-0033-0011	LTMS & RAIL MEAL LOADOUT	1985	MAC 144MCF416
4750-0025-0015	HULL PELLET COOLER	1997	MAC Cyclone HV39
Cogen Plant: Boilers, Emergency Generator and Associated Equipment			
FM-26	F&M PACKAGE BOILER	1986	LOW NO_x Burner
CFB BOILER	CFB FLUIDIZED BED BOILER	1986	FULLER 6M304TA 14.25 & NO_x Red
F-108	COAL RECEIVING & HANDLING	1986	Fugitives
CP-108	REINJECTION BIN	1986	MAC 97-2861-6C-100
CP-104	COAL BUNKER	1986	FLEX KLEEN 58 BVBS 16IIG
CP-105	LIMESTONE SILO	1986	FLEX KLEEN 58 BVBS 16IIG
CP-103	COAL SILO	1986	FLEX KLEEN 58BVBS 36IIG
CP-101	FLY ASH SILO	1986	FLEX KLEEN 100 CTBC 54 IIIG
CP-104A	SYSTEM C STORAGE	1986	SMOOT 84BV16
Storage Tanks			
4750-0011-0001	VEGETABLE OIL TANK #2 (300,809)	1953	None
4750-0011-0002	VEGETABLE OIL TANK #3 (1,381,843)	1953	None
4750-0011-0003	VEGETABLE OIL TANK #4 (1,586,300)	1953	None
4750-0011-0004	VEGETABLE OIL TANK #5 (1,586,300)	1953	None
4750-0011-0005	VEGETABLE OIL TANK #7 (950,000)	1973	None
4750-0011-0006	VEGETABLE OIL TANK #8 (2,641,778)	1974	None
4750-0011-0007	VEGETABLE OIL TANK #9 (2,518,619)	1974	None
4750-0011-0008	VEGETABLE OIL TANK #10 (4,018,627)	1974	None
4750-0011-0009	VEGETABLE OIL TANK #11 (5,510,631)	1974	None
4861-0001-0006	#1 HEXANE STORAGE TANK (14,930)	1981	Vented to Main Absorber Vents-Closed Loop
4861-0001-0007	#2 HEXANE STORAGE TANK (14,930)	1981	Vented to Main Absorber Vents-Closed Loop
4861-0001-0008	#3 HEXANE STORAGE TANK (IDLE) (14,930)	1953	Vented to Main Absorber Vents-Closed Loop

Emission Units (Plant ID/ State ID)	Description	Date Constructed	Emission Control Equipment (Baghouse Filters unless Noted as Cyclone)
4861-0014-0002	VEGETABLE OIL TANK #6 (498,215)	1973	None
4750-0005-0022	HEXANE STORAGE TANK 5A (30,000 Gal.)	1947	Vented to Main Absorber Vents-Closed Loop
4750-0005-0023	HEXANE STORAGE TANK 6A (30,000 Gal.)	1947	Vented to Main Absorber Vents-Closed Loop
4760-005-0005	HEXANE STORAGE TANK 4A (30,000 Gal.)	1947	Vented to Main Absorber Vents-Closed Loop
L-OIL-3	GAS STORAGE TANK (350)	Unknown	Submerged Loading Pipe
4750-0005-0010	#1 WORK TANK	1985	Vented to Main Absorber Vents-Closed Loop
4750-0005-0014	#1 SEPARATION TANK	1992	Vented to Main Absorber Vents-Closed Loop
4760-0001-0015	#1 MISCELLANEOUS TANK	1980	Vented to Main Absorber Vents-Closed Loop
4861-0001-0001	#2 WORK/SEPARATION TANK	1986	Vented to Main Absorber Vents-Closed Loop
4861-0002-0010	#2 MISCELLANEOUS TANK	1998	Vented to Main Absorber Vents-Closed Loop
4750-0006-0031	#1 EMERGENCY VEGETABLE OIL TANK	1988	Vented to Main Absorber Vents-Closed Loop

7.2 Corn, Soybean and Products Receiving, Cleaning and Storage (NSPS)

7.2.1 Description

The corn and soybeans are received at the Danville facility by rail and truck. Corn, soybeans and other products are conveyed and stored in storage tanks. All transfer in the system is by covered belt or enclosed conveyors. From storage the grain is conveyed to the process lines where it may be weighed, screened, cleaned, tempered and/or dried.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4870-0013-0001	CLEANING NORTH APM	APM 41216.12
4880-0034-0069	CORN CLEANING BLDG 115 #2	TD 484RF12
5012-0005-0021	TRUCK DUMP #4 & W. GAL GEN ASP	DD 484RF12

7.2.3 Applicability Provisions and Applicable Regulations

a. The emission units for the purpose of these unit-specific conditions are an "affected grain handling operation" described in Conditions 7.2.1 and 7.2.2.

b. The affected grain handling operation is subject to the emission limits identified in Condition 5.2.2.

c. The equipment associated with the affected grain handling operation are subject to the NSPS, 40 CFR 60 Subparts A: General Provisions and NSPS, 40 CFR 60 Subpart DD: Standards of Performance for Grain Elevators, because the equipment associated with the affected grain handling operation was constructed, modified, or commenced reconstruction after August 3, 1978. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 2).

d. The affected grain handling operation is subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart S: Visible and Particulate Matter Emissions from Agriculture. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.3 Dry Corn Milling, Processing and Products Handling

7.3.1 Description

The milling plant performs two functions. One is to separate a kernel of corn into three components, which are germ, bran and meal. The second function is to process the bran and meal to make finished product, while the germ is sent to the extraction plant for oil extraction. Once the product is made, it is either packaged or loaded into truck or rail car.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4870-0010-0055	BEMIS BAGGING	APM 16019.8
4870-0010-0030	BAGGING GEN ASP	APM 40020.8
4870-0013-0019	BAGGING PACKER GEN ASP	APM 14042.8
4880-0042-0057	BRAN DRYER PROCESS	APM 14036.8
4880-0042-0062	BRAN SIFTER PROCESS	APM 10144.8
4880-0034-0054	EAST MEAL DRY/COOL	APM 40120.10
4880-0034-0059	WEST MEAL DRY	APM 40144.8
4880-0034-0035	S APM BINNING	APM 41144.12
4880-0034-0027	8TH FR DRACCO SCREENING	DRACO 6MB-60
4880-0034-0001	9TH FR DRACCO SCREENING	DRACO 8MB-72
4880-0032-0052	BLDG 105 VACUUM	HOFFMAN 36X96
4870-0021-0001	BULK LOADING WHITE GOODS	DD 484RF12
4870-0015-0016	BLDG 104 VACUUM	HOFFMAN 38405A
4880-0042-0054	BRAN BIN	BUHLER 16S-6-30
4880-0008-0028	6TH FLR SCREENING	WIEDENMANN 2X4 LF150-1200
4880-0008-0040	W 4TH FLR GRAVITY TABLES	WIEDENMANN 2X5 LF225-2250
4880-0034-0010	S LUNCHROOM SCREENING	CD 484RF12

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4880-0034-0042	S CD SCREENING	CD 484RF12
4880-0034-0048	N CD GEN ASPIRATION	CD 484RF12
4880-0034-0019	N LUNCHROOM SCREENING	CD 484RF12
4870-0013-0024	PACK & BULK LOAD BLDG 115 #1	TD 484RF12
4880-0034-0077	CAMAS/BRAN BLDG 115 #3	TD 484RF12
4880-0034-0071	THRU/TAIL STOCK DRYERS BLDG 115 #4	TD 484RF12
4880-0032-0070	BLDG 115 VACUUM	HOFFMAN S54002
4870-0005-0003	TRACK 2 UNLOADING SEC REC	USS INC. 15CF P/D
4880-0009-0005	GERM FILTER	APM 16030.4
4932-0001-0001	LAB FILTER	APM 14106.4
4900-0003-0039	AB FIN PROD SURGE NORTH	MICROPUL 8B
4900-0003-0045	AB FIN PROD SURGE SOUTH	MICROPUL 8B
4990-0005-0012	1/2 PULVOCRON MEAL REC	BUHLER 9-6-100
4990-0005-0042	1/2 PULVOCRON VISC FLOUR REC	BUHLER 16-8-100
4990-0002-0010	3/4 PULVOCRON MEAL REC	BUHLER 9-6-100
4990-0004-0013	9/10 PULV MEAL SEC REC	BUHLER 16009.4
4990-0003-0010	7/8 PULV MEAL SEC REC	BUHLER 16009.4
4990-0002-0019	#3 PULVOCRON	BUHLER 37-8-220
4990-0002-0022	#4 PULVOCRON	BUHLER 37-8-220
4900-0001-0039	#5 PULVOCRON	BUHLER 37-8-220
4990-0005-0021	#1 PULVOCRON	BUHLER 37-8-220
4990-0005-0024	#2 PULVOCRON	BUHLER 37-8-220
4990-0003-0019	#7 PULVOCRON	APM 16022.8

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4990-0003-0022	#8 PULVOCRON	APM 16022.8
4990-0004-0022	#9 PULVOCRON	APM 16022.8
4990-0004-0025	#10 PULVOCRON	APM 16022.8
4990-0002-0008	3/4 PULV GRINDER SURGE	MICROPUL 2 1/2B
4990-0005-0010	1/2 PULV GRINDER SURGE	MICROPUL 2 1/2B
4990-0004-0011	9/10 PULV GRINDER SURGE	APM 16104.4
4990-0003-0008	7/8 PULV GRINDER SURGE	APM 16104.4
4990-0005-0028	1/2 FLOUR SURGE BIN	MICROPUL 2 1/2B
4990-0002-0026	3/4 FLOUR SURGE BIN	MICROPUL 2 1/2B
4990-0003-0026	7/8 FLOUR SURGE BIN	APM 16104.4
4990-0004-0029	9/10 FLOUR SURGE BIN	APM 16104.4
4990-0006-0024	HIBOND VISC FLAKE ROLLER MILL	APM 15066.8
4820-0001-0029	CSM BLENDED FOOD REC	APM 40070.7
4820-0001-0052	BLENDED FOOD PACK	APM 16150.6
4900-0001-0068	ALLBOND VISC FLOUR GEN ASP	BUHLER 16-8-100
4820-0003-0007	MILK BINS	MICROPUL 6B
4990-0007-0049	300 SERIES BINNING	MICROPUL 1F1
4990-0001-0002	SOY MEAL GEN ASP	APM 16022.4
4990-0001-0006	SOY MEAL SURGE	MICROPUL 6B
4990-0001-0025	MEAL BIN COOLER	APM 400072.10
4990-0002-0043	3/4 SOY FLOUR REC	APM16014.8
4820-0003-0072	TRI CAL BINS	APM 16009.8
4900-0001-0058	5/6 ALLOND REC	APM 16014.8

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4990-0003-0032	7/8 SOY FLOUR REC	APM 16014.8
4990-0002-0033	BIN 308	MICROPUL 6B
4820-0002-0072	BIN 509	MICROPUL 6B
4820-0002-0068	BIN 508	MICROPUL 6B
4820-0003-0038	BIN 310	MICROPUL 6B
4990-0002-0036	BIN 309	MICROPUL 6B
4990-0004-0037	9/10 PULVICRON REC	BUHLER 16-6-220
4820-0002-0038	MILK BINS	MICROPUL 21-6-220
4820-0002-0035	MILK BIN BAG DUMP	APM 14048.6
4990-0007-0029	BLENDING BATCH BIN GEN ASP	BUHLER 25S-6-30
4990-0007-0036	BLENDER GEN ASP	BUHLER 16S-6-30
4990-0007-0032	BLENDING GEN ASP	MICROPUL 36S-8-30
4820-0003-0063	CSB BINNING GEN ASP	BUHLER 64S-6-20
4820-0003-0059	CSB BINNING GEN ASP	BUHLER 64S-6-20
4990-0006-0040	GEN ASPIRATION	BUHLER 9-8-220
4900-0001-0091	#5 SL GEN ASP & #5 EXPANDER	APM 14024.6
4990-0011-0001	FIBER REC GEN ASP	BUHLER 9-8-220
4820-0002-0011	PCM ASPIRATION FILTER	MICROPUL 1F1
4870-0010-0005	CF BRAN PACKING BINNING	MICROPUL 25-8-220
4900-0005-0035	BLDG 111 VACUUM	HOFFMAN 60X120
4870-0006-0006	110/210 REC GEN ASP	APM 16030.4
4990-0011-0029	FIBER REC GEN ASP	APM 16019.4
4990-0001-0029	COOLING TOWER	APM 40072.10

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4820-0003-0022	INGREDIENT BIN 601	MICROPUL 4B
4820-0003-0026	INGREDIENT BIN 602	MICROPUL 4B
4820-0003-0030	INGREDIENT BIN 603	MICROPUL 2 1/2 B
4820-0003-0034	INGREDIENT BIN 604	APM 15105.4
4820-0003-0018	MICRO INGR DUMP FILTER	APM 15105.4
4820-0003-0004	MIXER GEN ASP	BUHLER 25S-6-30
4900-0001-0065	3/4 HAMMERMILL	APM 16009.6
4900-0001-0006	#3 & #4 EXPANDERS	APM 16009.6
4900-0005-0001	REPROCESS GEN CD ROOF	CD 376RF10
4900-0001-0042	#6 PULV GRINDER	BUHLER 37-8-220
4900-0001-0046	5/6 PULV AB FIN PROD SURGE BIN	MICROPUL 4B
4900-0002-0032	PELLET BINS	BUHLER 16S-6-30
4900-0003-0017	#1 PCM GRIND	APM 16022.8
4900-0003-0020	#2 PCM GRIND	APM 16022.8
4900-0003-0023	#3 PCM GRIND	APM 16022.8
4900-0003-0026	#4 PCM GRIND	APM 16022.8
4900-0003-0029	#5 PCM GRIND	APM 16022.8
4990-0006-0027	VISCOSITY FLOUR REC	APM 16022.8
4990-0011-0010	COND RECEIVER/SOY MEAL GRIND	APM 16014.8
4900-0005-0007	GRIND REJECT/SCRAP BIN	MICROPUL 2 1/2B
4900-0005-0029	BLDG 112 VACUUM	HOFFMAN 36X96
4900-0005-0006	N DAY GEN ASP & #5 EXPANDER	CD 484RF12
4820-0001-0093	BLENDED FOODS FILTER	DD 124RF10

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4900-0001-0030	AB GRINDING SURGE BIN	BUHLER 37-8-220
4912-0002-0054	HOMINY TRUCK LDOUT ASP	DD 484RF12
4860-0018-0007	N HOMINY FEED	MICROPUL 1F2
4860-0018-0003	S HOMINY FEED	MICROPUL 1F2
4860-0019-0003	FTS DRYER ASPIRATION	DAY CYCLONE HV60
4860-0022-0017	SEC CLEAN GRINDING	APM 15030.8
4860-0024-0003	#1 FTS BRAN DRYER	CORONA 15 CYCLONE
4912-0006-0017	TRACK 16 BULK RAIL LDOUT	WEIDENMAN LFT 2X7
4860-0017-0073	FLAKING GEN ASP	APM 40120.8
4860-0017-0003	GERM DRYER	DAY CYCLONE HV56
4860-0017-0072	GERM ROLLS ASPIRATION	DAY CYCLONE HV56
4860-0017-0026	BIN 945 GERM RECEIVER	BUHLER 36S-6-30
4860-0023-0001	GERM DUSTERS ASP	APM 40120.8
4860-0024-0037	PET BRAN KICE LITES FILTER	MICROPUL 36S-6-30

7.3.3 Applicability Provisions and Applicable Regulations

a. The "affected milling operations" for the purpose of these unit-specific conditions, are process units described in Conditions 7.3.1 and 7.3.2.

b. The affected milling operations are subject to the emission limits identified in Condition 5.2.2.

c. The affected milling operations are subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.5 Soybean Preparation

7.5.1 Description

The soybean preparation plant prepares the soybeans for the extraction process. Soybeans are received from the grain handling operations. (Note: The above grain handling operations of the storage elevator process the soybean as a whole grain; see the previous sections 7.1 and 7.2 for emission sources and limitations for those process sources). The beans are cleaned and then heated and dried in a fluidized heating and moisture removal system. The beans then enter a multiple system/integrated process (including above referenced cleaning systems) that cracks the beans and separates the hull from the bean. The hulls are sent to storage for processing later and the bean is sent to a conditioner. The conditioned beans are flaked in one of the several flaking rolls. The flaked beans are ready for the extraction. The dryer and conditioners use steam, so the pollutants from gas combustion are not present.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
4750-0036-0001	E-W BEAN CLEAN/DEHULL	484RF12
4750-0029-0074	HULLS GENERAL ASPIRATION	DD 276RFW12
4750-0029-0042	6th FLOOR GEN ASP	MICROPUL 100S-6-20
4750-0017-0043	CONDITIONER	DAY CYCLONE HV51
4750-0017-0044	CONDITIONER	DAY CYCLONE HV51
4750-0018-0043	FLAKER ASPIRATION	DAY CYCLONE HV74

7.5.3 Applicability Provisions and Applicable Regulations

a. The preparation operations described in Condition 7.5.1 and 7.5.2 are "affected preparation operations" for the purpose of these unit-specific conditions.

b. The affected preparation dryers and cleaning operations are subject to the emission limits identified in Condition 5.2.2.

c. The affected preparation operations are subject to 35 IAC Part 212 Subpart A: General Provisions and 35

7.8 Cogen Plant: Boilers, Emergency Generator and Associated Equipment

7.8.1 Description

The electrical cogeneration plant is a 20 megawatt coal fired unit which provides all electrical power and steam to the grain handling and extraction production lines. The 322.5 mmBtu/hr unit consists of a circulating fluidized bed (CFB) boiler that controls pollutant emissions by utilizing limestone sorbent and a pulse-jet baghouse. The CFB boiler can use petroleum coke and tire chips as a supplement fuel to the existing coal feed. The CFB boiler burns either natural gas or propane during startup. The plant also has a FM package boiler that serves as backup to the CFB unit, which only provides process steam for the facility. It burns No. 2 fuel oil or natural gas and has a heat input ranging from 245.7 to 262 million BTU per hour depending on the fuel burned. The boilers are backed up by a 2168 hp (115 kW) emergency generator, which burns No. 2 fuel oil. The generator is operated only during monthly 1-hour test periods and if the CFB boiler is not operating or if CFB boiler is in the process of being shut down. The CFB boiler has continuous emission monitoring (CEM) systems to measure for SO_2, NO_x, CO and Opacity. The FM boiler has CEM systems for NO_x, O_2 and Opacity.

7.8.2 List of Emission Units and Air Pollution Control Equipment

Emission Units (Plant ID/ State ID)	**Description**	**Emission Control Equipment** (Baghouse Filters unless Noted as Cyclone)
FM-26	F&M PACKAGE BOILER	LOW NO_x Burner
CFB BOILER	CFB FLUIDIZED BED BOILER	FULLER 6M304TA 14.25 & NO_x Red
F-108	COAL RECEIVING & HANDLING	Fugitives
CP-108	REINJECTION BIN	MAC 97-2861-6C-100
CP-104	COAL BUNKER	FLEX KLEEN 58 BVBS 16IIG
CP-105	LIMESTONE SILO	FLEX KLEEN 100 BVBC 16IIG
CP-103	COAL SILO	FLEX KLEEN 58 BVBS 16IIG
CP-101	FLY ASH SILO	FLEX KLEEN 100CTBC 54IIG
CP-104A	SYSTEM C STORAGE	SMOOT 84BV16

7.8.3 Applicability Provisions and Applicable Regulations

a. The "affected boilers for the purpose of these unit-specific conditions, are fuel combustion emission units as described in Conditions 7.8.1 and 7.8.2.

b. The affected boilers and associated emission units are subject to the emission limits identified in Condition 5.2.2.

c. The affected CFB boiler is subject to the NSPS, 40 CFR Subparts A: General Provisions and NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators, because the affected CFB boiler commenced construction after August 17, 1971. The CFB boiler is subject to the particulate matter and nitrogen oxides standards under subpart D_b and to the sulfur dioxide standards under this subpart, Subpart D (Sec. 60.43). The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 2).

d. Each affected boiler is subject to the NSPS, 40 CFR Subparts A: General Provisions and NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, because each affected boiler was constructed, modified, or commenced reconstruction after November 25, 1986. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 2).

e. Each affected boiler are subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart B: Visible Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

f. Each affected boiler are subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart E: Particulate Matter Emissions From Fuel Combustion Emission Units. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

g. Each affected boiler are subject to 35 IAC Part 214 Subpart A: General Provisions and 35 IAC Part 214 Subpart B: Sulfur Limitations for New Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

h. Each affected boiler are subject to 35 IAC Part 216 Subpart A: General Provisions and 35 IAC Part 216 Subpart B: Carbon Monoxide Emissions from Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

i. Each affected boiler is subject to 35 IAC Part 217 Subpart A: General Provisions and 35 IAC Part 217 Subpart B: Nitrogen Oxide Emissions from New Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

j. Each affected associated emission units are subject to 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

k. The affected CFB boiler is subject to the emission limits established in State Construction and Operating Permits for the operation in excess of applicable emission standards during startup, malfunction and breakdown. The State Construction and Operating Permits have been attached hereto and incorporated herein by reference (see Attachment 4).

7.8.4 Non-Applicability of Regulations of Concern

a. Pursuant to 35 IAC 215.303, fuel combustion emission units are not subject to 35 IAC 215.301, Use of Organic Material.

b. The affected boilers are not subject to the requirements of the NO_x Compliance Programs of 35 IAC 217 Part 217, because each affected generator and/or turbine has nameplate capacities less than 25 Mwe.

7.8.5 Operational and Production Limits and Work Practices

a. The Permittee shall follow good operating practices for the control equipment including periodic inspection, routine maintenance and prompt repair of defects.

7.8.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected boiler is subject to the following:

a. The affected boilers are subject to the emission limitations established in NSPS, 40 CFR 60 Subparts A: General Provisions and/or NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators and/or NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected boilers and associated emission units are subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

c. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.8.7 Testing Requirements

a. The affected boilers are subject to the testing requirements established in NSPS, 40 CFR 60 Subparts A: General Provisions and/or NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators and/or NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected boilers and associated emission units are subject to the testing requirements established in 35 IAC Part 212 Subpart A: General Provisions for Particulate Matter Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected boilers are subject to the testing requirements established in 35 IAC Part 214 Subpart A: General Provisions for Sulfur Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

d. The affected boilers are subject to testing requirements established in 35 IAC Part 216 Subpart A: General Provisions for Carbon Monoxide Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

e. The affected boilers and associated emission units are subject to testing requirements established by State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.8.8 Monitoring Requirements

a. The affected boilers are subject to the CEM system monitoring requirements established in NSPS, 40 CFR 60 Subparts A: General Provisions and/or NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators and/or NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected boilers are subject to the CEM system monitoring requirements established by State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected boiler to demonstrate compliance with Conditions 5.5.1, 7.8.3, and 7.8.6, pursuant to Section 39.5(7)(b) of the Act:

a. The affected CFB boiler is subject to the applicable recordkeeping requirements established in State Construction and Operating Permits for the operation in excess of applicable emission standards during startup, malfunction and breakdown. The State Construction and Operating Permits have been attached hereto and incorporated herein by reference (see Attachment 4).

b. The affected boilers are subject to the recordkeeping requirements established in NSPS, 40 CFR 60 Subparts A: General Provisions and/or NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators and/or NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, which have been attached hereto and incorporated herein by reference (see Attachment 2).

c. The affected boilers are subject to the applicable recordkeeping requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart B: Visible Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

d. The affected boilers are subject to the applicable recordkeeping requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart E: Particulate Matter Emissions From Fuel Combustion Emission Units. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

e. The affected boilers are subject to the applicable recordkeeping requirements established in 35 IAC Part 214 Subpart A: General Provisions and 35 IAC Part 214 Subpart B: Sulfur Limitations for New Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

f. The affected boilers are subject to the applicable recordkeeping requirements established in 35 IAC Part 216 Subpart A: General Provisions and 35 IAC Part 216 Subpart B: Carbon Monoxide Emissions from Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

g. The affected associated emission units are subject to the applicable recordkeeping requirements established in 35 IAC Part 212, Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

h. The affected boilers and associated emission units are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits. The State Construction and Operating Permits have been attached hereto and incorporated herein by reference (see Attachment 4).

i. Records addressing use of good operating practices for the control equipment:

    i. Records for periodic inspection of the control equipment with date, individual performing the inspection, and nature of inspection; and

ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

j. Records addressing Bituminous and Subbituminous coal consumption (ton/month and ton/year).

k. Records addressing Petroleum Coke and Tire Chips consumption (ton/month and ton/year) and percent weight basis per load of coal (% wt/load of coal).

l. Records addressing No 2 Fuel Oil consumption (gal/month and gal/year) and sulfur content as fired per emission unit (wt %).

m. Records addressing Natural Gas consumption per emission unit (scf/month and scf/year).

n. Records addressing Propane consumption (gal/month and gal/year).

o. The affected boiler emissions and associated emission units with supporting calculations, shall be maintained, as determined by the procedures in Condition 7.8.12 to demonstrate compliance to Conditions 5.5.2 and 7.8.6.

7.8.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected boiler with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The affected boilers are subject to the reporting requirements established in NSPS, 40 CFR 60 Subparts A: General Provisions and/or NSPS, 40 CFR 60 Subpart D: Standards and Performance for Fossil Fuel-Fired Steam Generators and/or NSPS, 40 CFR 60 Subpart D_b: Standards and Performance for Industrial-Commercial-Institutional Steam Generating Units, which have been attached hereto and incorporated herein by reference (see Attachment 2).

b. The affected boilers are subject to the applicable reporting requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart B: Visible Emissions. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

c. The affected boilers are subject to the applicable reporting requirements established in 35 IAC Part 212 Subpart A: General Provisions and 35 IAC Part 212 Subpart E: Particulate Matter Emissions From Fuel Combustion Emission Units. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

d. The affected boilers are subject to the applicable reporting requirements established in 35 IAC Part 214 Subpart A: General Provisions and 35 IAC Part 214 Subpart B: Sulfur Limitations for New Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

e. The affected boilers are subject to the applicable reporting requirements established in 35 IAC Part 216 Subpart A: General Provisions and 35 IAC Part 216 Subpart B: Carbon Monoxide Emissions from Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

f. The affected associated emission units are subject to the applicable reporting requirements established in 35 IAC Part 212, Subpart A: General Provisions and 35 IAC Part 212 Subpart L: Particulate Matter Emissions from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

g. The affected boilers and associated emission units are subject to the applicable reporting requirements established in State Construction and Operating Permits. The State Construction and Operating Permits have been attached hereto and incorporated herein by reference (see Attachment 4).

h. Emissions from or operation of an affected boiler or an associated emission unit in excess of the limits specified in Conditions 7.8.3, 7.8.5, and 7.8.6 within 30 days of such occurrence.

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

a. Compliance with the emission limits in Condition 7.8.3(e) is demonstrated by proper operation of the control systems and shall be based on the work practice requirements in Condition 7.8.5.

b. Compliance with the emission limits in Condition 7.8.3(h) is demonstrated under inherent operating conditions of an affected boiler.

c. Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.8.9 and the emission factors and data listed below:

i. The applicable emission factors for the Bituminous and Subbituminous Coal Combustion, Section 1.1, AP-42, Volume I, Fifth Edition, Supplement A, September/1998, or the current edition;

ii. The applicable emission factors for the Natural Gas-Fired Boiler Combustion, Section 1.4, AP-42, Volume I, Fifth Edition, Supplement A, March/1998, or the current edition;

iii. The applicable emission factors for the No. 2 Oil-Fired Boiler Combustion, Section 1.3, AP-42, Volume I, Fifth Edition, Supplement A, September/1998, or the current edition;

iv. The applicable emission factors for the Propane-Fired Boiler Combustion, Section 1.4, AP-42, Volume I, Fifth Edition, Supplement A, March/1998, or the current edition;

v. Data from analyses of No. 2 Fuel Oil representative of that combusted in the boilers;

vi. Engineering estimates on manufacturers' data;

vii. The applicable emission factor for SCC 30201407 from Corn Wet Milling, Section 9.9.7, AP-42, Volume 1, Fifth Edition, Supplement A, January 1995, or the current edition;

viii. The applicable emission factor for SCC 30500719 from Cement Manufacturing: Wet Process - 3241, AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, March 1990, or the current edition; and

ix. The results of emission test(s) on the affected process or a similar process. The emission test(s) shall be the most recent, valid and deemed acceptable to the Illinois EPA.

7.9 Storage Tanks

7.9.1 Description

The hexane storage tanks are horizontal tanks. Each is vented through a pressure valve set at 9 inches of water and a flame arrestor unit. The system is vapor balanced and plumbed in a closed circuit to the corn and soy extraction processes. Hexane emissions, associated with tank filling and use, are thus vented through the main absorber vents. The gasoline storage tank has a 350 gallon capacity.

7.9.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
4750-0011-0001	VEGETABLE OIL TANK #2 (300,809)	None
4750-0011-0002	VEGETABLE OIL TANK #3 (1,381,843)	None
4750-0011-0003	VEGETABLE OIL TANK #4 (1,586,300)	None
4750-0011-0004	VEGETABLE OIL TANK #5 (1,586,300)	None
4750-0011-0005	VEGETABLE OIL TANK #7 (950,000)	None
4750-0011-0006	VEGETABLE OIL TANK #8 (2,641,778)	None
4750-0011-0007	VEGETABLE OIL TANK #9 (2,518,619)	None
4750-0011-0008	VEGETABLE OIL TANK #10 (4,018,627)	None
4750-0011-0009	VEGETABLE OIL TANK #11 (5,510,631)	None
4861-0001-0006	#1 HEXANE STORAGE TANK (14,930)	Vented to Main Absorber Vents-Closed Loop System
4861-0001-0007	#2 HEXANE STORAGE TANK (14,930)	Vented to Main Absorber Vents-Closed Loop System
4861-0001-0008	#3 HEXANE STORAGE TANK (IDLE) (14,930)	Vented to Main Absorber Vents-Closed Loop System
4861-0014-0002	VEGETABLE OIL TANK #6 (498,215)	None
4750-0005-0022	HEXANE STORAGE TANK 5A (30,000 Gal.)	Vented to Main Absorber Vents-Closed Loop System
4750-0005-0023	HEXANE STORAGE TANK 6A (30,000 Gal.)	Vented to Main Absorber Vents-Closed Loop System

Emission Unit	Description	Emission Control Equipment
4750-0054-0016	#6 HEXANE STORAGE TANK (30,662)	Vented to Main Absorber Vents-Closed Loop System
L-OIL-3	GAS STORAGE TANK 350 GALLONS	Submerged Loading Pipe
4750-0005-0010	#1 WORK TANK	Vented to Main Absorber Vents-Closed Loop
4750-0005-0014	#1 SEPARATION TANK	Vented to Main Absorber Vents-Closed Loop
4760-0001-0015	#1 MISCELLANEOUS TANK	Vented to Main Absorber Vents-Closed Loop
4861-0001-0001	#2 WORK/SEPARATION TANK	Vented to Main Absorber Vents-Closed Loop
4861-0002-0010	#2 MISCELLANEOUS TANK	Vented to Main Absorber Vents-Closed Loop
4750-0006-0031	#1 EMERGENCY VEGETABLE OIL TANK	Vented to Main Absorber Vents-Closed Loop

7.9.3 Applicability Provisions and Applicable Regulations

a. The "affected hexane and gasoline storage tanks" for the purpose of these unit-specific conditions, are storage tanks described in Conditions 7.9.1 and 7.9.2.

b. The affected hexane and gasoline storage tanks are subject to the emission limits identified in Condition 5.2.2.

c. The affected hexane tanks are subject to the NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extraction for Vegetable Oil Production because the source owns or operates a vegetable oil production process that is a major source of HAP emissions. The Illinois EPA is administering NESHAP in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

d. The affected hexane and gasoline storage tanks are subject to 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart B: Organic Emissions from Storage and Loading Operations. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.9.4 Non-Applicability of Regulations of Concern

None

7.9.5 Operational and Production Limits and Work Practices

a. The affected hexane and gasoline storage tanks are subject to the Operational and Production Limits and Work Practices 35 IAC Part 215 Subpart A: General Provisions and 35 IAC Part 215 Subpart B: Organic Emissions from Storage and Loading Operations. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.9.6 Emission Limitations

a. The affected hexane tanks are subject to emission limitations established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extractions for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

7.9.7 Testing Requirements

a. The affected hexane tanks are subject to the testing requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extractions for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

7.9.8 Monitoring Requirements

None

7.9.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected storage tanks to demonstrate compliance with Conditions 5.5.1 and 7.9.5, pursuant to Section 39.5(7)(b) of the Act:

a. The affected hexane tanks are subject to the recordkeeping requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extractions for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. Design information for the affected storage tanks showing the presence of permanent submerged loading pipe or the use of submerged loading fill when loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) or loading of gasoline.

c. Maintenance and repair records for the affected storage tanks, as related to the repair or replacement of the loading pipe.

d. Identification and throughput of each material stored in the affected storage tanks, gal/yr.

e. The VOM emissions from the affected storage tanks based on the materials stored, the tank throughputs, and the applicable emission factors and formulas with supporting calculations, ton/yr.

7.9.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected storage tanks with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The affected hexane tanks are subject to the reporting requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extractions for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. Any storage of VOL in the affected storage tanks that is not in compliance with the requirements of Conditions 7.9.3(c) or 7.9.3(d) within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.

7.9.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected storage tanks without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

a. Changes to components related to either the submerged loading pipe or submerged fill, including addition of new components and repair and replacement of components.

b. Changes in the material stored in the affect storage tank, provided the affected storage tanks continues to comply with the Conditions of Section 7.9 of this permit.

7.9.12 Compliance Procedures

a. The affected hexane tanks are subject to the compliance determination requirements established in NESHAP, 40 CFR 63 Subparts A: General Provisions and NESHAP, 40 CFR 63 Subparts GGGG: Solvent Extractions for Vegetable Oil Production. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

b. Compliance with Conditions 7.9.3(g) is considered to be assured by the use of submerged loading pipe or submerged fill as required in Condition 7.9.5(a) and by the recordkeeping requirement of Condition 7.9.9(a).

c. Compliance with the emission limits in Conditions 5.5 shall be based on the recordkeeping requirements in Condition 7.9.9 and the emission factors and formulas listed below:

i. For purposes of calculating VOM emissions, the current version of the USEPA's Tanks Program is acceptable.

217/782-2113

REVISED CONSTRUCTION PERMIT

PERMITTEE

Lauhoff Grain Co.
321 East North Street
Danville, Illinois 61832

Attention: Richard E. Fentem

Application No.: C7203005 I.D. No.: 183020ABT
Applicant's Designation: 112-05 Date Received: May 2, 1984
Subject: Reprocessing General Aspiration
Date Issued: June 26, 1984
Location: 321 East North Street, Danville, Illinois

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a revised operating rate, hours and control equipment for source 112-05 of the reprocessing system as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions of particulate matter from source112-05 shall not exceed 8.5 tons/year. This limit is based on the maximum emission rate (0.23 lbs/hr) and the maximum hours of operation (8,568) indicated in the permit application.

2. This permit is issued based upon replacement of a rotoclone with a baghouse and a reduction in operating rate from 36,000 lbs/hr to 20,000 lbs/hr which will result in a reduction of 3.5 tons/year in the emission of particulate matter. This reduction is based on the average hours and operating rate of the existing operation and the maximum hours and operating rate of the new operation.

Bharat Mathur, P.E.
Manager, Permit Section
Division of Air Pollution Control

BM:FSM:sd/1290d/20

cc: Region 3
ID File

Analyst Sheet

December 6, 2004

Facility:	Bunge Milling, Inc.		
ID Number:	183020ABT	**Engineer:**	LAK
Permit Number:	96020027		
Type:	Corn and Soybean Processing	**Flags:**	None
Date Received:	December 8, 2003	**Toxic Screening:**	Required

- **Discussion**

Purpose:

Applicant is requesting an Administrative Admendment to their CAAPP permit for its facility. This administrative amendment includes a change in the operator to Russ Lazzell/ Management of Safety and Environment. The other changes included typographical errors. Because the changes in the permit were only administrative, no formal public notice was issued.

Major Issues:

None

Comments:

FOS: None

Public Notice: None

USEPA Notice: None

- **Conclusion**

Grant the permit.

IBP2/7/96 → M. Reed

R000860

BUNGE

Enhancing the Value of America's Harvest[SM]

August 31, 2005

Don Sutton, Permit Section, Bureau of Air
Illinois Environmental Protection Agency
Division of Air Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62702

Bunge Milling, Inc.
321 East North Street, Danville
ID No. 183020ABT

Dear Mr. Sutton:

Enclosed is an application to add the existing coal crusher and boiler ash loadout to the current Title V permit, as a significant modification. No current construction is associated with this request. Both systems were installed at the time of the COGEN plant construction in the late 1980's. However, the firm that initially permitted and operated the COGEN plant and Bunge until just recently missed that the initial construction permit and subsequent operating permit applications failed to cover the coal crusher and boiler ash loadout.

The coal crusher system is totally enclosed by design with no point source of fugitive emissions. Portions of the Coal Preparation Plant federal NSPS [40 CFR 60 Subpart Y, section 40.252(c)] applies to coal crusher system. Enclosed is a report of the initial visible emission evaluation required by Subpart Y for the crusher and associated conveying equipment.

There are emissions associated with the boiler ash loadout system. Also, allowable solvent losses from the soybean and corn oil extraction processes have decreased due to the applicable MACT regulations. Therefore, the application addresses these emissions changes and the Fee Determination for CAAPP Permit form has been revised.

I thank Monish Patel for his responses to my questions concerning the permitting required for coal crusher and ash loadout systems.

Please call me at the letterhead phone number if you have questions concerning this matter.

Sincerely,
Bunge North America, Inc.

Robert L. Henricks, PE
Environmental Specialist

RECEIVED
AUG 31 2005
IEPA - DAPC - SPFLD

p.c.: A. Silver, corp. file

Bunge North America, Inc.
P.O. Box 28500
11720 Borman Drive, St. Louis, MO 63146-1000, USA
Phone: (314) 292-2342 **Fax:** (314) 292-2384
robertlhenricks@bunge.com

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FORM 292 – 2 PAGES
PLANT EMISSIONS SPREADSHEET – 6 PAGES
INITIAL COMPLIANCE VISIBLE EMISSIONS REPORT – 1 COPY
COGEN ASH LOADOUT SCHEMATIC

PROCESS DESCRIPTION
COAL CRUSHER
SOURCE NUMBER F-109

The Pennsylvania TKK granulator is a relatively low speed hammermill. This coal crusher on a daily basis receives run-of-mine coal directly from the truck unloading hopper (F-1000) via an enclosed drag conveyor and discharges to one of two bucket elevators via an enclosed drag conveyor and a diverter. (See schematic in the visible emission report.) The crusher is totally enclosed in its housing and is located beneath the coal bunker in an enclosed area. All associated conveying equipment is totally enclosed by design and hard flanged to equipment feeding and being fed by each conveyor. If visible emissions were to result from operation of the coal crusher they would be emitted from the coal receiving shed surrounding the area above the coal unloading hopper.

PROCESS DESCRIPTION
COAL ASH LOADOUT
SOURCE NUMBER F-1001

Spent boiler ash, fly and bed, is stored in the fly ash silo, source number F-101. Ash is conveyed periodically to the silo via a totally enclosed system at any time the fluidized bed boiler is in operation. On a daily basis spent ash is withdrawn from the silo, mixed with water in the truck loading mixing auger and trucked offsite for disposal. There is no enclosure for the ash loadout operation. Wetting the ash provides the necessary fugitive dust control.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL — PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: _____
Page _____ of _____
Source Designation: _____

APPLICATION FOR CAAPP PERMIT
(CHECK ONLY ONE)

- ☐ INITIAL APPLICATION
- ☐ RENEWAL APPLICATION
- ☒ SIGNIFICANT MODIFICATION

FOR AGENCY USE ONLY
ID NUMBER: 183020ABT
PERMIT #: 96021027
DATE: 8/31/05

SOURCE INFORMATION

1) SOURCE NAME: BUNGE MILLING INC.
2) DATE FORM COMPLETED: June 6, 2005
3) SOURCE STREET ADDRESS: 321 EAST NORTH STREET
4) CITY: DANVILLE
5) ZIP: 61832
6) IS THE SOURCE LOCATED WITHIN CITY LIMITS? ☒ YES ☐ NO
7) TOWNSHIP NAME: DANVILLE
8) COUNTY: VERMILLION
9) TYPICAL NO. OF EMPLOYEES AT THE SOURCE: 300
10) ILLINOIS AIR POLLUTION SOURCE ID NO. (IF KNOWN): 183020ABT
11) FEDERAL EMPLOYER IDENTIFICATION NO. (FEIN):
12) TYPE OF SOURCE AND PRODUCTS PRODUCED: SOYBEAN PROCESS OPERATION: MEAL, HULLS, OIL
13) PRIMARY STANDARD INDUSTRIAL CLASSIFICATION (SIC) CATEGORY: SOYBEAN OILS EXTRACTION
14) PRIMARY SIC NO.: 2075
15a) LATITUDE (DD:MM:SS): 40:07:00
b) LONGITUDE (DD:MM:SS): 87:38:00
16a) UTM ZONE:
b) UTM VERTICAL (KM):
c) UTM HORIZONTAL (KM):
17a) COORDINATE METHOD:
b) REFERENCE LOCATION:
c) COORDINATE ACCURACY:
18) SOURCE ENVIRONMENTAL CONTACT PERSON: ARIC SILVER
19) CONTACT PERSON'S TELEPHONE NO.: 217/442-1800, EXT 784

RECEIVED
AUG 31 2005
IEPA - DAPC - SPFLD

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE _____
Printed on Recycled Paper
200-CAAPP

FOR APPLICANT'S USE
REV. JUNE 2005

STF IL77037F 1

OWNER INFORMATION

20) NAME:

SAME

21) ADDRESS:

22) CITY:	23) STATE:	24) ZIP:

25) OWNER'S AGENT (IF APPLICABLE):

OPERATOR INFORMATION

26) NAME:

SAME

27) ADDRESS:

28) CITY:	29) STATE:	30) ZIP:

BILLING INFORMATION

31) NAME:

SAME

32) ADDRESS:

33) CITY:	34) STATE:	35) ZIP:

36) CONTACT PERSON:	37) CONTACT PERSON'S TELEPHONE NO.:

APPLICANT INFORMATION

38) WHO IS THE PERMIT APPLICANT? (CHECK ONE):
- [X] OWNER
- [ ] OPERATOR

39) ALL CORRESPONDENCE TO: (CHECK ONE)
- [X] OWNER
- [ ] OPERATOR
- [ ] SOURCE

40) ATTENTION NAME AND/OR TITLE FOR WRITTEN CORRESPONDENCE:

PHIL HUFFMAN SITE MANAGER

41) TECHNICAL CONTACT PERSON FOR APPLICATION:	42) CONTACT PERSON'S TELEPHONE NO.:
ROBERT L HENRICKS	314-292-2342

APPLICATION PAGE _____

SUMMARY OF APPLICATION CONTENTS

NOTE: ITEMS 43 TO 61 WILL BE USED FOR APPLICATION COMPLETENESS DETERMINATION.

43) DOES THE APPLICATION INCLUDE A TABLE OF CONTENTS?
☒ YES ☐ NO

44) DOES THE APPLICATION INCLUDE A LIST OF ALL ITEMS AND ACTIVITIES FOR WHICH A PERMIT IS BEING SOUGHT?
☒ YES ☐ NO

45) DOES THE APPLICATION INCLUDE A PLOT PLAN AND/OR MAP DEPICTING THE AREA WITHIN ONE-QUARTER MILE OF THE SOURCE?
☐ YES ☒ NO

46) DOES THE APPLICATION INCLUDE A PROCESS FLOW DIAGRAM(S) SHOWING ALL EMISSION UNITS AND CONTROL EQUIPMENT, AND THEIR RELATIONSHIP?
☒ YES ☐ NO
AS APPICABLE TO THE COAL CRUSHER & ASH LOADOUT

47) DOES THE APPLICATION INCLUDE A COMPLETE PROCESS DESCRIPTION FOR THE SOURCE?
☒ YES ☐ NO
AS APPICABLE TO THE COAL CRUSHER & ASH LOADOUT

48a) DOES THE APPLICATION INCLUDE THE APPROPRIATE, COMPLETED FORMS FOR ALL INDIVIDUAL EMSSION UNITS AND AIR POLLUTION CONTROL EQUIPMENT, LISTING ALL APPLICABLE REQUIREMENTS AND PROPOSED EXEMPTIONS FROM OTHERWISE APPLICABLE REQUIREMENTS?
☒ YES ☐ NO
AS APPICABLE TO THE COAL CRUSHER & ASH LOADOUT

b) DOES THE APPLICATION ADDRESS OTHER MODES OF OPERATION FOR WHICH A PERMIT IS BEING SOUGHT?
☒ *NA ☐ YES ☐ NO
*NOTE: NOT APPLICABLE

c) DOES THE APPLICATION INCLUDE ALL REASONABLY ANTICIPATED OPERATING SCENARIOS FOR WHICH A PERMIT IS BEING SOUGHT?
☒ *NA ☐ YES ☐ NO
*NOTE: NOT APPLICABLE

49) DOES THE APPLICATION INCLUDE A COMPLETED "FUGITIVE EMISSION" FORM 391-CAAPP?
☐ YES ☒ NO

50) DOES THE APPLICATION INCLUDE A COMPLETED "FEE DETERMINATION FOR CAAPP PERMIT" FORM 292-CAAPP?
(NOTE: ANNUAL FEES WILL BE BASED UPON INFORMATION CONTAINED IN THIS FORM.)
☐ YES ☒ NO

51) DOES THE APPLICATION INCLUDE A COMPLETED "HAZARDOUS AIR POLLUTANT EMISSION SUMMARY" FORM 215-CAAPP?
☐ YES ☒ NO

52) DOES THE APPLICATION INCLUDE THE CALCULATIONS ON WHICH THE FOLLOWING, TO THE EXTENT THEY ARE RELATED TO AIR EMISSIONS, WERE BASED:
☐ YES ☒ NO
- POLLUTANT EMISSION RATES,
- FUELS AND RAW MATERIALS USAGE, AND
- CONTROL EQUIPMENT EFFICIENCY?

53) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT" FORM 293-CAAPP?
☐ YES ☒ NO

54) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE CERTIFICATION" FORM 296-CAAPP?
☐ YES ☒ NO

55) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE-ADDENDUM FOR NONCOMPLYING EMISSION UNITS" FORM 294-CAAPP FOR ONE OR MORE NONCOMPLIANT EMISSION UNITS FOR WHICH ISSUANCE OF A CAAPP PERMIT IS REQUESTED?
☒ *NA ☐ YES ☐ NO
*NOTE: NOT APPLICABLE

56)	HAS THE APPLICANT RETAINED A COPY OF THIS APPLICATION AT THE SOURCE? (NOTE: IF TRADE SECRET INFORMATION IS NOT BEING SUBMITTED, THEN ONLY THE ORIGINAL APPLICATION NEED BE INITIALLY SUBMITTED. HOWEVER, THE ILLINOIS EPA MAY REQUEST UP TO 4 COPIES OF THE FINAL APPLICATION PRIOR TO PUBLIC NOTICE.)	☒ YES ☐ NO
57a)	DOES THE APPLICATION CONTAIN TRADE SECRET INFORMATION?	☐ YES ☒ NO
b)	IF YES, HAS SUCH INFORMATION BEEN PROPERLY MARKED AND CLAIMED, AND TWO SEPARATE COPIES OF THE APPLICATION SUITABLE FOR PUBLIC INSPECTION BEEN SUBMITTED, IN ACCORDANCE WITH APPLICABLE REGULATIONS?	☐ YES ☐ NO
58)	DOES THE APPLICATION INCLUDE AN EARLY REDUCTION DEMONSTRATION FOR HAZARDOUS AIR POLLUTANTS (HAP) PURSUANT TO SECTION 112(i)(5) OF THE CLEAN AIR ACT AS AMENDED IN 1990?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
59)	DOES THE APPLICATION INCLUDE A PROPOSED DETERMINATION OF MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT) FOR HAZARDOUS AIR POLLUTANTS PURSUANT TO SECTION 112 OF THE CLEAN AIR ACT AS AMENDED IN 1990?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
60)	HAS THE APPLICANT REGISTERED A RISK MANAGEMENT PROGRAM FOR ACCIDENTAL RELEASES PURSUANT TO SECTION 112(r) OF THE CLEAN AIR ACT AS AMENDED IN 1990 OR INTENDS TO COMPLY WITH THIS REQUIREMENT IN ACCORDANCE WITH ITS COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
61a)	FOR CAAPP PERMIT RENEWALS, DOES THE APPLICATION INCLUDE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
b)	FOR SIGNIFICANT MODIFICATIONS AND INITIAL CAAPP APPLICATIONS SUBMITTED AFTER APRIL 20, 1998, DOES THE APPLICATION INCLUDE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64 FOR EMISSION UNITS WITH POST-CONTROL EMISSIONS GREATER THAN OF EQUAL TO THE MAJOR SOURCE THRESHOLD?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
62)	FOR SIGNIFICANT MODIFICATIONS, DOES THE APPLICATION INCLUDE A DESCRIPTION OF THE PROPOSED CHANGE(S), INCLUDING ALL PHYSICAL CHANGES IN EQUIPMENT, CHANGES IN THE METHOD OF OPERATION, CHANGES IN EMISSIONS, AND ANY NEW APPLICABLE REQUIREMENTS WHICH WILL APPLY AS A RESULT OF THE PROPOSED CHANGE?	☒ YES ☐ NO

NOTE: ANSWERING "NO" TO ANY OF THE ABOVE (ITEMS 43-62, EXCEPT ITEM 57a) MAY RESULT IN THE APPLICATION BEING DEEMED INCOMPLETE.

63)	DOES THE APPLICATION REQUEST TO UTILIZE THE OPERATIONAL FLEXIBILITY PROVISIONS AND INCLUDE THE INFORMATION REQUIRED FOR SUCH USE?	☐ YES ☒ NO
64a)	DOES THE APPLICANT HEREBY REQUEST A PERMIT SHIELD FOR THE ENTIRE SOURCE?	☒ YES ☐ NO
b)	IF NO, DOES THE APPLICATION CONTAIN A REQUEST FOR A PERMIT SHIELD FOR SPECIFIC ITEMS ONLY, IN ACCORDANCE WITH THE INSTRUCTIONS FOR A CAAPP PERMIT?	☒ YES ☐ NO
65)	DOES THE APPLICATION INCLUDE A COMPLETED "LISTING OF INSIGNIFICANT ACTIVITIES" FORM 297-CAAPP?	☐ YES ☒ NO
66)	DOES THE APPLICATION INCLUDE A DRAWING PROVIDING THE SOURCE LAYOUT? IF NO, PLEASE NOTE THAT THE ILLINOIS EPA MAY REQUEST SUCH A DRAWING UPON DETAILED REVIEW OF THE APPLICATION.	☐ YES ☒ NO

67) WHY IS THE APPLICANT APPLYING FOR A CAAPP PERMIT (CHECK ALL THAT APPLY)?

☒ THE POTENTIAL TO EMIT ONE OR MORE AIR POLLUTANTS FOR THE SOURCE IS 100 TONS/YEAR OR GREATER.

☐ THE SOURCE IS AN AFFECTED SOURCE FOR ACID RAIN DEPOSITION.

☐ THE POTENTIAL TO EMIT VOM IS 25 TONS/YEAR OR MORE AND THE SOURCE IS LOCATED IN ONE OF THE FOLLOWING CHICAGO AREA COUNTIES OR TOWNSHIPS:

- COOK COUNTY
- DUPAGE COUNTY
- KANE COUNTY
- LAKE COUNTY
- McHENRY COUNTY
- WILL COUNTY
- AUX SABLE TOWNSHIP, GRUNDY COUNTY
- GOOSE LAKE TOWNSHIP, GRUNDY COUNTY
- OSWEGO TOWNSHIP, KENDALL COUNTY

NOTE: THE U. S. EPA HAS APPROVED AN EXEMPTION ON NITROGEN OXIDES (NOx) EMISSIONS AS AN OZONE PRECURSOR IN THE CHICAGO OZONE NON-ATTAINMENT AREA. THEREFORE THE MAJOR SOURCE THRESHOLD FOR NOx EMISSIONS IS 100 TONS/YEAR UNTIL THIS EXEMPTION IS NO LONGER EFFECTIVE. SHOULD THE CURRENT NOx EXEMPTION BE NO LONGER EFFECTIVE, THE MAJOR SOURCE THRESHOLD FOR NOx EMISSIONS WILL BE 25 TONS/YEAR IN THE ABOVE CHICAGO AREAS COUNTIES AND TOWNSHIPS.

☒ THE POTENTIAL TO EMIT AN INDIVIDUAL HAZARDOUS AIR POLLUTANT IS 10 TONS/YEAR OR MORE, OR THE POTENTIAL TO EMIT ALL SOURCE WIDE HAZARDOUS AIR POLLUTANTS IS 25 TONS/YEAR OR MORE, OR MEETS AN APPLICABLE LOWER THRESHOLD.

☐ THE SOURCE CONTAINS EQUIPMENT OR OPERATIONS SUBJECT TO CERTAIN USEPA EMISSION STANDARDS (NSPS AND NESHAP) FOR WHICH USEPA REQUIRES A CAAPP PERMIT.

68a) ARE ACTUAL EMISSIONS OF THE SOURCE BELOW THE APPLICABILITY LEVELS FOR A CAAPP PERMIT?	☐ YES	☒ NO
b) DOES THE APPLICATION CONTAIN PROPOSED PERMIT LIMITATIONS THAT WILL CONSTRAIN THE EMISSIONS AND PRODUCTION OR OPERATION OF THE SOURCE SUCH THAT POTENTIAL EMISSIONS OF THE SOURCE WILL FALL BELOW THE LEVELS FOR WHICH A CAAPP PERMIT IS REQUIRED?	☐ YES	☒ NO
c) DOES THE APPLICANT HEREBY REQUEST A FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CONSTRAINING THE EMISSIONS AND PRODUCTION OR OPERATION OF THE SOURCE SUCH THAT POTENTIAL EMISSIONS WOULD FALL BELOW APPLICABILITY LEVELS AND THEREBY EXCLUDE THE SOURCE FROM REQUIRING A CAAPP PERMIT?	☐ YES	☒ NO

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

69) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: Phil Huffman

AUTHORIZED SIGNATURE

SITE MANAGER

TITLE OF SIGNATORY

PHIL HUFFMAN

TYPED OR PRINTED NAME OF SIGNATORY

8/30/05

DATE

APPLICATION PAGE _____

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL — PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: _____
Page _____ of _____
Source Designation:
_____

PROCESS EMISSION UNIT DATA AND INFORMATION

FOR AGENCY USE ONLY
ID NUMBER:
EMISSION POINT #:
DATE:

SOURCE INFORMATION

1) SOURCE NAME:
BUNGE MILLING, INC.

2) DATE FORM PREPARED:
JUNE 6, 2005

3) SOURCE ID NO. (IF KNOWN):
183020ABT

GENERAL INFORMATION

4) NAME OF EMISSION UNIT:
COAL CRUSHER

5) NAME OF PROCESS:
COGEN PLANT

6) DESCRIPTION OF PROCESS:
GENERATION OF STEAM & ELECTRICITY

7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR ACTIVITY ACCOMPLISHED:
SAME AS 6

8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT:
COAL CRUSHER

9) MANUFACTURER OF EMISSION UNIT (IF KNOWN):
PENNSYLVANIA CRUSHER CORPORATION

10) MODEL NUMBER (IF KNOWN):
TKK 26 X 20 "GT"

11) SERIAL NUMBER (IF KNOWN):
5786

12) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED)

a) CONSTRUCTION (MONTH/YEAR):
AUGUST 1986

b) OPERATION (MONTH/YEAR):
MARCH 1990

c) LATEST MODIFICATION (MONTH/YEAR):
NONE

13) DESCRIPTION OF MODIFICATION (IF APPLICABLE):

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
REV. JUNE 2005

14) DOES THE EMISSION UNIT HAVE MORE THAN ONE MODE OF OPERATION? ☐ YES ☒ NO

IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE PROCESS EMISSION UNIT FORM 220-CAAPP MUST BE COMPLETED FOR EACH MODE):

15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT):

The coal crusher and associated conveying equipment are totally enclosed by design. No add-on pollutant control equipment is required to adequately control emissions to comply with the applicable NSPS.

16) WILL EMISSIONS DURING STARTUP EXCEED EITHER THE ALLOWABLE EMISSION RATE PURSUANT TO A SPECIFIC RULE, OR THE ALLOWABLE EMISSION LIMIT AS ESTABLISHED BY AN EXISTING OR PROPOSED PERMIT CONDITION? ☐ YES ☒ NO

IF YES, COMPLETE AND ATTACH FORM 203-CAAPP "REQUEST TO OPERATE WITH EXCESS EMISSIONS DURING STARTUP OF EQUIPMENT".

17) PROVIDE ANY LIMITATIONS ON SOURCE OPERATION AFFECTING EMISSIONS OR ANY WORK PRACTICE STANDARDS (E.G., ONLY ONE UNIT IS OPERATED AT A TIME):

None

OPERATING INFORMATION

18) ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSION RELATED, FROM WHICH THE FOLLOWING OPERATING INFORMATION, MATERIAL USAGE INFORMATION AND FUEL USAGE DATA WERE BASED AND LABEL AS EXHIBIT 220-1. REFER TO SPECIAL NOTES OF FORM 202-CAAPP.

19a) MAXIMUM OPERATING HOURS	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 52	
b) TYPICAL OPERATING HOURS	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 50	
20) ANNUAL THROUGHPUT	DEC-FEB (%): 25	MAR-MAY (%): 25	JUN-AUG (%): 25	SEP-NOV (%): 25

MATERIAL USAGE INFORMATION

	MAXIMUM RATES		TYPICAL RATES	
21a) RAW MATERIALS	LBS/HR	TONS/YEAR	LBS/HR	TONS/YEAR
coal	130,000	134,203	100,000	113,000

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21b) PRODUCTS	MAXIMUM RATES LBS/HR	MAXIMUM RATES TONS/YEAR	TYPICAL RATES LBS/HR	TYPICAL RATES TONS/YEAR
crushed coal	SAME	SAME	SAME	SAME

21c) BY-PRODUCTS MATERIALS	MAXIMUM RATES LBS/HR	MAXIMUM RATES TONS/YEAR	TYPICAL RATES LBS/HR	TYPICAL RATES TONS/YEAR
none				

FUEL USAGE DATA

22a) MAXIMUM FIRING RATE (MILLION BTU/HR):	b) TYPICAL FIRING RATE (MILLION BTU/HR):	c) DESIGN CAPACITY FIRING RATE (MILLION BTU/HR):
NA	NA	NA

d) FUEL TYPE:

☐ NATURAL GAS ☐ FUEL OIL: GRADE NUMBER _____ ☐ COAL ☐ OTHER _____

IF MORE THAN ONE FUEL IS USED, ATTACH AN EXPLANATION AND LABEL AS EXHIBIT 220-2.

e) TYPICAL HEAT CONTENT OF FUEL (BTU/LB, BTU/GAL OR BTU/SCF):	f) TYPICAL SULFUR CONTENT (WT %., NA FOR NATURAL GAS):
g) TYPICAL ASH CONTENT (WT %., NA FOR NATURAL GAS):	h) ANNUAL FUEL USAGE (SPECIFY UNITS, E.G., SCF/YEAR, GAL/YEAR, TON/YEAR):

23) ARE COMBUSTION EMISSIONS DUCTED TO THE SAME STACK OR CONTROL AS PROCESS UNIT EMISSIONS? ☐ YES ☐ NO

IF NO, IDENTIFY THE EXHAUST POINT FOR COMBUSTION EMISSIONS:

APPLICABLE RULES

24) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.204(j)(4), 3.5 LBS/GAL):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
PM	40 CFR 60 SUBPART Y	20% OPACITY [40 CFR 60.252(c)]
	SECTION 212.321	PM HOURLY EMISSIONS LIMIT

25) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
NA		

26) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
PM	40 CFR 60.8	INITIAL COMPLIANCE
	SECTION 254	ANNUAL EMISSIONS REPORT

27) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
NA		

28) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
PM	40 CFR 60 SUBPART Y	INITIAL COMPLIANCE [40 CFR 60.254(b)(2)

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29) DOES THE EMISSION UNIT QUALIFY FOR AN EXEMPTION FROM AN OTHERWISE APPLICABLE RULE? ☐ YES ☒ NO

IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 220-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION.

COMPLIANCE INFORMATION

30) IS THE EMISSION UNIT IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? ☒ YES ☐ NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE — ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

31) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

3 HOURS OF METHOD 9 OBSERVATIONS

32) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

PERIODIC VISUAL CHECK DURING OPERATION

TESTING, MONITORING, RECORDKEEPING AND REPORTING

33a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
VIS EMISSIONS		VISUAL	MONTHLY

33b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
VIS EMISSIONS	COMPUTER	SITE MANAGER	ENV MANAGER

c) IS COMPLIANCE OF THE EMISSION UNIT READILY DEMONSTRATED BY REVIEW OF THE RECORDS? ☒ YES ☐ NO

IF NO, EXPLAIN:

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND/OR SUBMITTAL TO THE AGENCY UPON REQUEST? ☒ YES ☐ NO

IF NO, EXPLAIN:

34a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

NA

b) WHAT OPERATING PARAMETER(S) IS(ARE) BEING MONITORED (E.G., VOM EMISSIONS TO ATMOSPHERE)?

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., STACK MONITOR 3 FEET FROM EXIT):

34d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? ☐ YES ☐ NO

IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? ☐ YES ☐ NO

IF NO, EXPLAIN:

f) IS EACH MONITOR OPERATED AT ALL TIMES THE ASSOCIATED EMISSION UNIT IS IN OPERATION? ☐ YES ☐ NO

IF NO, EXPLAIN:

35) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 220-4:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
NA				

36) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY

(37) EMISSION INFORMATION

REGULATED AIR POLLUTANT		[X] [1]ACTUAL EMISSION RATE [X] [1]UNCONTROLLED EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE			[2]PERMITTED EMISSION RATE	
		LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[3]OTHER TERMS	[4]DM	[5]RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	[5]RATE (UNITS)	TONS PER YEAR (TONS/YR)
CARBON MONOXIDE (CO)	MAXIMUM:						( )				
	TYPICAL:						( )				
LEAD	MAXIMUM:						( )				
	TYPICAL:						( )				
NITROGEN OXIDES (NOx)	MAXIMUM:						( )				
	TYPICAL:						( )				
PARTICULATE MATTER (PART)	MAXIMUM:	0.0	0.0				23.6 (PPH)	212.321	103.4	0.0	
	TYPICAL:						( )				
PARTICULATE MATTER < = 10 MICROMETERS (PM10)	MAXIMUM:	0.0	0.0				( )			0.0	
	TYPICAL:						( )				
SULFUR DIOXIDE(SO2)	MAXIMUM:						( )				
	TYPICAL:						( )				
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:						( )				
	TYPICAL:						( )				
OTHER, SPECIFY: _____	MAXIMUM:						( )				
	TYPICAL:						( )				
EXAMPLE: PARTICULATE MATTER	MAXIMUM:	*5.00*	*21.9*	*0.3 GR/DSCF*		*1*	*6.0 (LBS/HR)*	*212.321*	*26.28*	*5.5 LBS/HR*	*22*
	TYPICAL:	*4.00*	*14.4*	*0.24 GR/DSCF*		*4*	*5.5 (LBS/HR)*	*212.321*	*19.80*		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-5.

[1]CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO THE ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.
[2]PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
[5]RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

APPLICATION PAGE _____

(38) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

HAP INFORMATION		☒ [1]ACTUAL EMISSION RATE ☒ [1]UNCONTROLLED EMISSION RATE				ALLOWABLE BY RULE	
NAME OF HAP EMITTED	[2]CAS NUMBER		POUNDS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[4]DM	[5]RATE OR STANDARD	APPLICABLE RULE
NA		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
EXAMPLE:		MAXIMUM:	*10.0*	*1.2*		*2*	*98% by wt control device*	*CFR 61*
Benzene	*71432*	TYPICAL:	*8.0*	*0.8*		*2*	*leak-tight trucks*	*61.302(b),(d)*

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

[1]PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY.
[2]CAS - CHEMICAL ABSTRACT SERVICE NUMBER.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITIATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.).
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
[5]RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

EXHAUST POINT INFORMATION

THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

39) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:

NA

40) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS.

41) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):

42) DISCHARGE HEIGHT ABOVE GRADE (FT):

43) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):

44) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA.

45) EXIT GAS FLOW RATE	a) MAXIMUM (ACFM):	b) TYPICAL (ACFM):
46) EXIT GAS TEMPERATURE	a) MAXIMUM (°F):	b) TYPICAL (°F):

47) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD):

48) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:

	NAME	FLOW DIAGRAM DESIGNATION
a)	COAL CRUSHER	COAL CRUSHER
b)		
c)		
d)		
e)		

THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE.

49a) LATITUDE:	b) LONGITUDE:	
50) UTM ZONE:	b) UTM VERTICAL (KM):	c) UTM HORIZONTAL (KM):

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL — PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
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PROCESS EMISSION UNIT DATA AND INFORMATION

FOR AGENCY USE ONLY
ID NUMBER:
EMISSION POINT #:
DATE:

SOURCE INFORMATION

1) SOURCE NAME:
BUNGE MILLING, INC.

2) DATE FORM PREPARED: JUNE 6, 2005

3) SOURCE ID NO. (IF KNOWN): 183020ABT

GENERAL INFORMATION

4) NAME OF EMISSION UNIT:
BOILER ASH LOADOUT

5) NAME OF PROCESS:
COGEN PLANT

6) DESCRIPTION OF PROCESS:
GENERATION OF STEAM & ELECTRICITY

7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR ACTIVITY ACCOMPLISHED:
SAME AS 6

8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT:
ASH LOADOUT

9) MANUFACTURER OF EMISSION UNIT (IF KNOWN):
NUMEROUS

10) MODEL NUMBER (IF KNOWN):

11) SERIAL NUMBER (IF KNOWN):

12) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED)

a) CONSTRUCTION (MONTH/YEAR):
AUGUST 1986

b) OPERATION (MONTH/YEAR):
MARCH 1990

c) LATEST MODIFICATION (MONTH/YEAR):
NONE

13) DESCRIPTION OF MODIFICATION (IF APPLICABLE):

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
REV. JUNE 2005

14) DOES THE EMISSION UNIT HAVE MORE THAN ONE MODE OF OPERATION? ☐ YES ☒ NO

IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE PROCESS EMISSION UNIT FORM 220-CAAPP MUST BE COMPLETED FOR EACH MODE):

15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT):

The boiler ash loadout utilizes an auger to mix water with the boiler ash as the ash passes from the storage silo prior to dropping into the truck transporting the ash to disposal.

16) WILL EMISSIONS DURING STARTUP EXCEED EITHER THE ALLOWABLE EMISSION RATE PURSUANT TO A SPECIFIC RULE, OR THE ALLOWABLE EMISSION LIMIT AS ESTABLISHED BY AN EXISTING OR PROPOSED PERMIT CONDITION? ☐ YES ☒ NO

IF YES, COMPLETE AND ATTACH FORM 203-CAAPP "REQUEST TO OPERATE WITH EXCESS EMISSIONS DURING STARTUP OF EQUIPMENT".

17) PROVIDE ANY LIMITATIONS ON SOURCE OPERATION AFFECTING EMISSIONS OR ANY WORK PRACTICE STANDARDS (E.G., ONLY ONE UNIT IS OPERATED AT A TIME):

Water must be utilized in the ash auger/mixer during ash loadout.

OPERATING INFORMATION

18) ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSION RELATED, FROM WHICH THE FOLLOWING OPERATING INFORMATION, MATERIAL USAGE INFORMATION AND FUEL USAGE DATA WERE BASED AND LABEL AS EXHIBIT 220-1. REFER TO SPECIAL NOTES OF FORM 202-CAAPP.

19a) MAXIMUM OPERATING HOURS	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 52	
b) TYPICAL OPERATING HOURS	HOURS/DAY: 4.5	DAYS/WEEK: 5	WEEKS/YEAR: 50	
20) ANNUAL THROUGHPUT	DEC-FEB (%): 25	MAR-MAY (%): 25	JUN-AUG (%): 25	SEP-NOV (%): 25

MATERIAL USAGE INFORMATION

	MAXIMUM RATES		TYPICAL RATES	
21a) RAW MATERIALS	LBS/HR	TONS/YEAR	LBS/HR	TONS/YEAR
coal ash	100,000	20,276	30,352	17,073

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220-CAAPP

21b) PRODUCTS	MAXIMUM RATES LBS/HR	MAXIMUM RATES TONS/YEAR	TYPICAL RATES LBS/HR	TYPICAL RATES TONS/YEAR
none	SAME	SAME	SAME	SAME

21c) BY-PRODUCTS MATERIALS	MAXIMUM RATES LBS/HR	MAXIMUM RATES TONS/YEAR	TYPICAL RATES LBS/HR	TYPICAL RATES TONS/YEAR
none				

FUEL USAGE DATA

22a) MAXIMUM FIRING RATE (MILLION BTU/HR):	b) TYPICAL FIRING RATE (MILLION BTU/HR):	c) DESIGN CAPACITY FIRING RATE (MILLION BTU/HR):
NA	NA	NA

d) FUEL TYPE:

☐ NATURAL GAS ☐ FUEL OIL: GRADE NUMBER _____ ☐ COAL ☐ OTHER _____

IF MORE THAN ONE FUEL IS USED, ATTACH AN EXPLANATION AND LABEL AS EXHIBIT 220-2.

e) TYPICAL HEAT CONTENT OF FUEL (BTU/LB, BTU/GAL OR BTU/SCF):	f) TYPICAL SULFUR CONTENT (WT %., NA FOR NATURAL GAS):
g) TYPICAL ASH CONTENT (WT %., NA FOR NATURAL GAS):	h) ANNUAL FUEL USAGE (SPECIFY UNITS, E.G., SCF/YEAR, GAL/YEAR, TON/YEAR):

23) ARE COMBUSTION EMISSIONS DUCTED TO THE SAME STACK OR CONTROL AS PROCESS UNIT EMISSIONS? ☐ YES ☐ NO

IF NO, IDENTIFY THE EXHAUST POINT FOR COMBUSTION EMISSIONS:

APPLICABLE RULES

24) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.204(j)(4), 3.5 LBS/GAL):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
PM	SECTION 212.123	30% OPACITY GENERALLY

25) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
NA		

26) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
PM	SECTION 254	ANNUAL EMISSIONS REPORT

27) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
NA		

28) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
NA		

29) DOES THE EMISSION UNIT QUALIFY FOR AN EXEMPTION FROM AN OTHERWISE APPLICABLE RULE? ☐ YES ☒ NO

IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 220-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION.

COMPLIANCE INFORMATION

30) IS THE EMISSION UNIT IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? ☒ YES ☐ NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE — ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

31) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

VISUAL OBSERVATION DURING OPERATION

32) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

PERIODIC VISUAL CHECK DURING OPERATION

TESTING, MONITORING, RECORDKEEPING AND REPORTING

33a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
VIS EMISSIONS		VISUAL	MONTHLY
ASH LOADED	TON	SCALE	EA. TRUCK

33b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
VIS EMISSIONS	COMPUTER	SITE MANAGER	ENV MANAGER
ASH LOADED	SCALE TICKET	SITE MANAGER	ENV MANAGER

c) IS COMPLIANCE OF THE EMISSION UNIT READILY DEMONSTRATED BY REVIEW OF THE RECORDS? ☒ YES ☐ NO

IF NO, EXPLAIN:

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND/OR SUBMITTAL TO THE AGENCY UPON REQUEST? ☒ YES ☐ NO

IF NO, EXPLAIN:

34a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

NA

b) WHAT OPERATING PARAMETER(S) IS(ARE) BEING MONITORED (E.G., VOM EMISSIONS TO ATMOSPHERE)?

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., STACK MONITOR 3 FEET FROM EXIT):

34d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? ☐ YES ☐ NO

IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? ☐ YES ☐ NO

IF NO, EXPLAIN:

f) IS EACH MONITOR OPERATED AT ALL TIMES THE ASSOCIATED EMISSION UNIT IS IN OPERATION? ☐ YES ☐ NO

IF NO, EXPLAIN:

35) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 220-4:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
NA				

36) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY

(37) EMISSION INFORMATION

REGULATED AIR POLLUTANT		[X] [1]ACTUAL EMISSION RATE / [ ] [1]UNCONTROLLED EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE			[2]PERMITTED EMISSION RATE	
		LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[3]OTHER TERMS	[4]DM	[5]RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	[5]RATE (UNITS)	TONS PER YEAR (TONS/YR)
CARBON MONOXIDE (CO)	MAXIMUM:						( )				
	TYPICAL:						( )				
LEAD	MAXIMUM:						( )				
	TYPICAL:						( )				
NITROGEN OXIDES (NOx)	MAXIMUM:						( )				
	TYPICAL:						( )				
PARTICULATE MATTER (PART)	MAXIMUM:	8.2	1.65				20.5 (PPH)	212.321	89.9	8.2 pph	1.65
	TYPICAL:						( )				
PARTICULATE MATTER <= 10 MICROMETERS (PM10)	MAXIMUM:	1.63	0.33				( )			1.63 pph	0.33
	TYPICAL:						( )				
SULFUR DIOXIDE(SO2)	MAXIMUM:						( )				
	TYPICAL:						( )				
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:						( )				
	TYPICAL:						( )				
OTHER, SPECIFY: _____	MAXIMUM:						( )				
	TYPICAL:						( )				
EXAMPLE: PARTICULATE MATTER	MAXIMUM:	*5.00*	*21.9*	*0.3 GR/DSCF*		*1*	*6.0 (LBS/HR)*	*212.321*	*26.28*	*5.5 LBS/HR*	*22*
	TYPICAL:	*4.00*	*14.4*	*0.24 GR/DSCF*		*4*	*5.5 (LBS/HR)*	*212.321*	*19.80*		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-5.

[1]CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO THE ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.
[2]PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
[5]RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

(38) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

HAP INFORMATION		[X] [1]ACTUAL EMISSION RATE [X] [1]UNCONTROLLED EMISSION RATE				ALLOWABLE BY RULE	
NAME OF HAP EMITTED	[2]CAS NUMBER		POUNDS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[4]DM	[5]RATE OR STANDARD	APPLICABLE RULE
NA		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
EXAMPLE:		MAXIMUM:	*10.0*	*1.2*		*2*	*98% by wt control device leak-tight trucks*	*CFR 61 61.302(b),(d)*
Benzene	*71432*	TYPICAL:	*8.0*	*0.8*		*2*		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

[1]PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY.
[2]CAS - CHEMICAL ABSTRACT SERVICE NUMBER.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITIATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.).
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
[5]RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

EXHAUST POINT INFORMATION

THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT

39) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:

ASH LOADOUT AUGER DISCHARGE

40) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS.

SPOUT

41) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):

100

42) DISCHARGE HEIGHT ABOVE GRADE (FT):

15

43) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):

44) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA.

NA

45) EXIT GAS FLOW RATE	a) MAXIMUM (ACFM): NA	b) TYPICAL (ACFM): NA
46) EXIT GAS TEMPERATURE	a) MAXIMUM (°F): AMB + 20	b) TYPICAL (°F): AMB + 20

47) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD):

NA

48) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:

	NAME	FLOW DIAGRAM DESIGNATION
a)	BOILER ASH LOADOUT	BOILER ASH LOADOUT
b)	ASH LOADOUT AUGER	ASH LOADOUT AUGER
c)		
d)		
e)		

THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE.

49a) LATITUDE:	b) LONGITUDE:	
50) UTM ZONE:	b) UTM VERTICAL (KM):	c) UTM HORIZONTAL (KM):

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Source Designation:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL — PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

AIR POLLUTION CONTROL EQUIPMENT DATA AND INFORMATION

FOR AGENCY USE ONLY
ID NUMBER:
CONTROL EQUIPMENT #:
DATE:

THIS FORM MUST BE COMPLETED FOR EACH AIR POLLUTION CONTROL EQUIPMENT. COMPLETE AND PROVIDE THIS FORM IN ADDITION TO THE APPLICABLE ADDENDUM FORM 260-A THROUGH 260-K. A SEPARATE FORM MUST BE COMPLETED FOR EACH MODE OF OPERATION OF AIR POLLUTION CONTROL EQUIPMENT FOR WHICH A PERMIT IS BEING SOUGHT.

SOURCE INFORMATION

1) SOURCE NAME:
BUNGE NORTH AMERICA, INC.

2) DATE FORM PREPARED:
JUNE 6, 2005

3) SOURCE ID NO. (IF KNOWN):
183020ABT

GENERAL INFORMATION

4) NAME OF AIR POLLUTION CONTROL EQUIPMENT AND/OR CONTROL SYSTEM:
ASH LOADOUT AUGER

5) FLOW DIAGRAM DESIGNATION OF CONTROL EQUIPMENT AND/OR CONTROL SYSTEM:
SAME

6) MANUFACTURER OF CONTROL EQUIPMENT (IF KNOWN):

7) MODEL NUMBER (IF KNOWN):
NA

8) SERIAL NUMBER (IF KNOWN):

9) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EQUIPMENT (ACTUAL OR PLANNED)

a) CONSTRUCTION (MONTH/YEAR):
AUGUST 1986

b) OPERATION (MONTH/YEAR):
MARCH 1990

c) LATEST MODIFICATION (MONTH/YEAR):
UNK

10) BRIEFLY DESCRIBE MODIFICATION (IF APPLICABLE):
MODIFIED SYSTEM TO IMPROVE DUST CONTROL (PARTICULATE MATTER) AT LOADOUT

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
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11) LIST ALL EMISSION UNITS AND OTHER CONTROL EQUIPMENT DUCTING EMISSIONS TO THIS CONTROL EQUIPMENT:

NAME	DESIGNATION OR CODE NUMBER
BOILER ASH LOADOUT	F-1001

12) DOES THE CONTROL EQUIPMENT HAVE MORE THAN ONE MODE OF OPERATION? ☐ YES ☒ NO

IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE AIR POLLUTION CONTROL EQUIPMENT FORM 260-CAAPP MUST BE COMPLETED FOR EACH MODE):

13) IDENTIFY ALL ATTACHMENTS TO THIS FORM RELATED TO THIS AIR POLLUTION CONTROL EQUIPMENT (E.G., TECHNICAL DRAWINGS):
NA

OPERATING SCHEDULE

14) IDENTIFY ANY PERIOD WHEN THE CONTROL EQUIPMENT WILL NOT BE OPERATING DUE TO SCHEDULED MAINTENANCE AND/OR REPAIRS WHEN THE FEEDING EMISSION UNIT(S) TO THIS CONTROL EQUIPMENT IS/ARE IN OPERATION:
NA

15a) IDENTIFY ANY PERIODS DURING OPERATION OF THE FEEDING EMISSION UNIT(S) WHEN THE CONTROL EQUIPMENT IS/ARE NOT USED:
NA

b) IS THIS CONTROL EQUIPMENT IN OPERATION AT ALL OTHER TIMES THAT THE FEEDING EMISSION UNIT(S) IS/ARE IN OPERATION? ☒ YES ☐ NO

IF NO, EXPLAIN AND PROVIDE THE DURATION OF THE CONTROL EQUIPMENT DOWNTIME:

APPLICABLE RULES

16) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.207(b)(1), 81% OVERALL & 90% CONTROL DEVICE EFF.):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
PM	212.321	E=2.54 X P^0.534
VISIBLE EMISSIONS	212.310 & 212.314	DISSALLOWED BEYOND PROPERTY LINE

17) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
PM	SECTION 39.5(7)(b)	EMISSIONS ON A 12 MONTH ROLLING BASIS

18) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
PM	SECTION 39.5(7)(f)(ii)	DEVIATIONS
	IAC 201.302(a)	ANNUAL EMISSIONS

19) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
NA		

20) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
NA		

COMPLIANCE INFORMATION

21) IS THE CONTROL SYSTEM IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? [X] YES [ ] NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE — ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

22) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

PERIODIC VISUAL OBSERVATION

23) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

SAME AS ABOVE

TESTING, MONITORING, RECORDKEEPING AND REPORTING

24a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
VISIBLE OBSERVATION	NA	VISUAL	DAILY

24b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
VISIBLE EMISSIONS	COMPUTER	SITE MANAGER	ENV MANAGER

c) IS COMPLIANCE OF THE CONTROL EQUIPMENT READILY DEMONSTRATED BY REVIEW OF THE RECORDS? ☒ YES ☐ NO

IF NO, EXPLAIN:

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND/OR SUBMITTAL TO THE AGENCY UPON REQUEST? ☒ YES ☐ NO

IF NO, EXPLAIN:

25a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

NA

b) WHAT OPERATING PARAMETER(S) IS(ARE) BEING MONITORED (E.G., COMBUSTION CHAMBER TEMPERATURE)?

NA

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., EXIT OF COMBUSTION CHAMBER):

NA

25d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? ☐ YES ☐ NO

IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? ☐ YES ☐ NO

IF NO, EXPLAIN:

f) IS EACH MONITOR OPERATED AT ALL TIMES THAT THE CONTROL EQUIPMENT IS IN OPERATION? ☐ YES ☐ NO

IF NO, EXPLAIN:

26) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 260-1:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS

27) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY
35 IAC PART 254	ANNUAL EMISSIONS	ANNUALLY

CAPTURE AND CONTROL

28) DESCRIBE THE CAPTURE SYSTEM USED TO CONTAIN, COLLECT AND TRANSPORT EMISSIONS TO THE CONTROL EQUIPMENT. INCLUDE ALL HOODS, DUCTS. FANS, ETC. ALSO INCLUDE THE METHOD OF CAPTURE USED AT EACH EMISSION POINT. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 260-2):

THE ASH STORAGE SILO IS HARD SPOUTED WITH NO OPENINGS EXCEPT TO THE AUGER. WATER IS PIPED INTO THE AUGER. THE AUGER MIXES THE WATER AND BOILER ASH. THE WETTED ASH FALLS FROM THE SPOUT AT THE FAR END OF THE AUGER AND FALLS INTO THE TRANSPORT TRUCK.

29) ARE FEATURES OF THE CAPTURE SYSTEM ACCURATELY DEPICTED IN THE FLOW DIAGRAM CONTAINED IN THIS APPLICATION? [X] YES [ ] NO

IF NO, A SKETCH SHOWING THE FEATURES OF THE CAPTURE SYSTEM SHOULD BE ATTACHED AND LABELED AS EXHIBIT 260-3:

30) PROVIDE THE ACTUAL (MINIMUM AND TYPICAL) CAPTURE SYSTEM EFFICIENCY, CONTROL EQUIPMENT DESTRUCTION/REMOVAL EFFICIENCY, AND THE OVERALL REDUCTION EFFICIENCY PROVIDED BY THE COMBINATION OF THE CAPTURE SYSTEM AND CONTROL EQUIPMENT FOR EACH REGULATED AIR POLLUTANT TO BE CONTROLLED. ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH THESE EFFICIENCIES WERE BASED AND LABEL AS EXHIBIT 260-4:

a) CONTROL PERFORMANCE:

	REGULATED AIR POLLUTANT	CAPTURE SYSTEM EFFICIENCY (%) (MIN)	CAPTURE SYSTEM EFFICIENCY (%) (TYP)	CONTROL EQUIPMENT EFFICIENCY (%) (MIN)	CONTROL EQUIPMENT EFFICIENCY (%) (TYP)	OVERALL REDUCTION EFFICIENCY (%) (MIN)	OVERALL REDUCTION EFFICIENCY (%) (TYP)
i	PM/PM10	80	80			80	80
ii							
iii							

iv EXPLAIN ANY OTHER REQUIRED LIMITS ON CONTROL EQUIPMENT PERFORMANCE SUCH AS OUTLET CONCENTRATION, COOLANT TEMPERATURE, ETC.:

NA

b) METHOD USED TO DETERMINE EACH OF THE ABOVE EFFICIENCIES (E.G., STACK TEST, MATERIAL BALANCE, MANUFACTURER'S GUARANTEE, ETC.) AND THE DATE LAST TESTED, IF APPLICABLE:

EFFICIENCY DETERMINATION METHOD	DATE LAST TESTED
CAPTURE: VISUAL OBSERVATION	
CONTROL:	
OVERALL: VISUAL OBSERVATION	

c) REQUIRED PERFORMANCE:

	REGULATED AIR POLLUTANT	CAPTURE SYSTEM EFFICIENCY (%)	CONTROL EQUIPMENT EFFICIENCY (%)	OVERALL REDUCTION EFFICIENCY (%)	APPLICABLE RULE
i	PM	49.72		49.72	212.321
ii					
iii					

iv EXPLAIN ANY OTHER REQUIRED LIMITS ON CONTROL EQUIPMENT PERFORMANCE SUCH AS OUTLET CONCENTRATION, COOLANT TEMPERATURE, ETC.:

(31) EMISSION INFORMATION

REGULATED AIR POLLUTANT		[1]ACTUAL EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE			[2]PERMITTED EMISSION RATE	
		LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[3]OTHER TERMS	[4]DM	[5]RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	RATE (UNITS)	TONS PER YEAR (TONS/YR)
CARBON MONOXIDE (CO)	MAXIMUM:						( )				
	TYPICAL:						( )				
LEAD	MAXIMUM:						( )				
	TYPICAL:						( )				
NITROGEN OXIDES (NOx)	MAXIMUM:						( )				
	TYPICAL:						( )				
PARTICULATE MATTER (PART)	MAXIMUM:	8.2	1.65				20.5 (PPH)	212.321	89.9	8.2 pph	1.65
	TYPICAL:						( )				
PARTICULATE MATTER < = 10 MICROMETERS (PM10)	MAXIMUM:	1.63	0.33				( )			1.63 pph	0.33
	TYPICAL:						( )				
SULFUR DIOXIDE (SO2)	MAXIMUM:						( )				
	TYPICAL:						( )				
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:						( )				
	TYPICAL:						( )				
OTHER, SPECIFY: _____	MAXIMUM:						( )				
	TYPICAL:						( )				
EXAMPLE: PARTICULATE MATTER	MAXIMUM:	*5.00*	*21.9*	*0.3 GR/DSCF*		*1*	*6.0 (LBS/HR)*	*212.321*	*26.28*	*5.5 LBS/HR*	*22*
	TYPICAL:	*4.00*	*14.4*	*0.24 GR/DSCF*		*4*	*5.5 (LBS/HR)*	*212.321*	*19.80*		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 260-5.

[1]PROVIDE CONTROLLED EMISSIONS (E.G., THE EMISSIONS THAT WOULD RESULT AFTER ALL CONTROL AND CAPTURE EFFICIENCIES ARE ACCOUNTED FOR).
[2]PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITIATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE. 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
[5]RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

(32) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

HAP INFORMATION		[1]ACTUAL EMISSION RATE					ALLOWABLE BY RULE	
NAME OF HAP EMITTED	[2]CAS NUMBER		POUNDS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	[3]OTHER TERMS	[4]DM	[5]RATE OR STANDARD	APPLICABLE RULE
NA		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
EXAMPLE: *Benzene*	*71432*	MAXIMUM:	*10.0*	*1.2*		*2*	*98% by wt control device leak-tight trucks*	*CFR 61 61.302(b), (d)*
		TYPICAL:	*8.0*	*0.8*		*2*		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 260-6.

[1]PROVIDE CONTROLLED EMISSIONS (E.G., THE EMISSIONS THAT WOULD RESULT AFTER ALL CONTROL AND CAPTURE EFFICIENCIES ARE ACCOUNTED FOR).
[2]CAS - CHEMICAL ABSTRACT SERVICE NUMBER.
[3]PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.).
[4]DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
[5]RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

EXHAUST POINT INFORMATION

33) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS.

boiler ash loadout spout

34) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):

100

35) DISCHARGE HEIGHT ABOVE GRADE (FT):

15

36) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):

37) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA.

NA

38) EXIT GAS FLOW RATE	a) MAXIMUM (ACFM): NA	b) TYPICAL (ACFM): NA
39) EXIT GAS TEMPERATURE	a) MAXIMUM (°F): AMB + 20	b) TYPICAL (°F): AMB + 20

40) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD):

NA

41) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:

	NAME	FLOW DIAGRAM DESIGNATION
a)	BOILER ASH LOADOUT	BOILER ASH LOADOUT
b)	ASH LOADOUT AUGER	ASH LOADOUT AUGER
c)		
d)		
e)		
f)		
g)		

42) WHAT PERCENTAGE OF THE CONTROL EQUIPMENT EMISSIONS ARE BEING DUCTED TO THIS EXHAUST POINT (%)?

100

43) IF THE PERCENTAGE OF THE CONTROL EQUIPMENT EMISSIONS BEING DUCTED TO THE EXHAUST POINT IS NOT 100%, THEN EXPLAIN WHERE THE REMAINING EMISSIONS ARE BEING EXHAUSTED TO:

THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE.

44a) LATITUDE:	b) LONGITUDE:	
45) UTM ZONE:	b) UTM VERTICAL (KM):	c) UTM HORIZONTAL (KM):

APPLICATION PAGE _____

FOR APPLICANT'S USE
Revision #: _____
Date: _____
Page _____ of _____
Source Designation:
_____

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL — PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

SUPPLEMENTAL FORM AIR POLLUTION CONTROL EQUIPMENT OTHER TYPE OF CONTROL (260K)

FOR AGENCY USE ONLY
ID NUMBER:
CONTROL EQUIPMENT #:
DATE:

DATA AND INFORMATION

1) FLOW DIAGRAM DESIGNATION OF CONTROL:

ASH LOADOUT AUGER

2) GENERIC NAME OF "OTHER" CONTROL EQUIPMENT:

SAME

3) PROVIDE A DESCRIPTION AND SKETCH WITH DIMENSIONS AND FLOW RATES:

AUGER ACTS AS A MIXER FOR WATER AND BOILER ASH, ENABLING GREATER CONTROL OF PARTICULATE MATTER AT ASH LOADOUT

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

4) INLET EMISSION STREAM PARAMETERS:

	MAX	TYPICAL
PRESSURE (mmHG):		
OXYGEN CONTENT:	(%)	(%)
MOISTURE CONTENT:	(%)	(%)
RELATIVE HUMIDITY:	(%)	(%)

5a) ARE HALOGENATED ORGANICS PRESENT? ☐ YES ☒ NO

b) ARE PARTICULATES PRESENT? ☒ YES ☐ NO

c) ARE METALS PRESENT? ☒ YES ☐ NO

IN TRACE AMOUNTS IN THE BOILR ASH

6) CONTROL OPERATING PARAMETERS:

	DURING MAXIMUM OPERATION OF FEEDING UNIT(S)	DURING TYPICAL OPERATION OF FEEDING UNIT(S)
INLET GAS TEMPERATURE (DEGREES F°):		
INLET GAS FLOW RATE (SCFM):		
EFFICIENCY (SPECIFY REGULATED AIR POLLUTANT PM/PM10):	(%) 80	(%) 80
EFFICIENCY (SPECIFY REGULATED AIR POLLUTANT _____):	(%)	(%)

ASH LOADOUT FUGITIVES

F-1001

PM Emission Factor	0.82	lb/ton	AP-42, SCC 3-05-007-19, Cement loadout times	3.4				
PM10 Emission Factor	0.16	lb/ton						
PM10/PM ratio	0.20							
Rate/hour	100,000	pounds		**Operation Schedule**				
	50	tons		4.5	hr/day @	0.25	hrs/truck @	18 trucks/day
Rate/year	20,276	tons max		5	days/week			
Control	80	% - water spray in loadout auger		50	weeks/yr			
Operation max	1125	hours/year		1125	hr/yr			

Potential PM emissions = Emission factor * process rate * control
a. Max Hourly = (lb/ton)*(ton/hour)*(100-cap eff)/100
= 8.2 lbs/hour

b. Max Yearly = (lb/ton)*(ton/year)/(2000 lb/ton)*(100-cap eff)/100
= 1.65 tons/year

Potential PM10 emissions = Emission factor * process rate * control
a. Max Hourly = (lb/ton)*(ton/hour)
= 1.63 lbs/hour

b. Max Yearly = (lb/ton)*(ton/year)/(2000 lb/ton)
= 0.33 tons/year

Allowable emissions = $2.54P^{0.534}$
= 20.5 lb/hr
89.9 ton/yr

Required efficiency = 49.72%

FOR APPLICANT'S USE
Revision #: _____
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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL — PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FEE DETERMINATION FOR CAAPP PERMIT

FOR AGENCY USE ONLY
ID NUMBER:
PERMIT #:
DATE:

THE DATA PROVIDED ON THIS FORM WILL BE USED TO DETERMINE THE PERMIT FEE. THE EMISSION LEVELS STATED ON THIS FORM CAN ONLY BE USED FOR THE PURPOSE OF PERMIT FEE DETERMINATION IF THE APPLICANT IS WILLING TO ACCEPT THESE LEVELS AS PERMIT SPECIAL CONDITIONS. EMISSIONS DATA PROVIDED ON THIS FORM MUST BE IDENTICAL TO DATA IN THE "PERMITTED EMISSION RATE" COLUMNS PROVIDED ON THE DATA AND INFORMATION FORM FOR INDIVIDUAL EMISSION UNITS OR CONTROL EQUIPMENT. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS 292-1.

SOURCE INFORMATION

1) SOURCE NAME: BUNGE MILLING INC.

2) DATE FORM PREPARED: Aug 25, 2005

3) SOURCE ID NO. (IF KNOWN): 183020ABT

FEE DATA

4) WILL THE SOURCE PAY THE MAXIMUM FEE OF $100,000.00 PER YEAR? ☐ YES ☒ NO

IF YES, THE REMAINDER OF THIS FORM DOES NOT NEED TO BE COMPLETED.

5) EMISSION UNIT*	NITROGEN OXIDES (NO_x) (TONS/YR)	PARTICULATE MATTER (PART) (TONS/YR)	SULFUR DIOXIDE (SO_2) (TONS/YR)	VOLATILE ORGANIC MATERIAL (VOM) (TONS/YR)	OTHER** SPECIFY Pb/HF/HCl (TONS/YR)
PEUG1		17.4			
PEUG2		26.0			
PEUG3		4.13		354.0	
PEUG4		5.08			
PEUG5		14.87		838.0	
PEUG6		7.1			
BOILERS	183.2	83.23	1,264.94	5.6	1.07/12.1/96.7
FUEL HANDLING		11.6			

* EMISSION UNIT - PROVIDE THE NAME AND FLOW DIAGRAM DESIGNATION OF THE EMISSION UNIT AS IT APPEARS ON THE DATA AND INFORMATION FORM.

** OTHER - ANY HAZARDOUS AIR POLLUTANT (HAP) NOT INCLUDED ELSEWHERE, E.G., CHLORINE, HCl, ETC.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
REV. JUNE 2005

5) (CONTINUED) EMISSION UNIT*	NITROGEN OXIDES (NO_x) (TONS/YR)	PARTICULATE MATTER (PART) (TONS/YR)	SULFUR DIOXIDE (SO_2) (TONS/YR)	VOLATILE ORGANIC MATERIAL (VOM) (TONS/YR)	OTHER** SPECIFY _____ (TONS/YR)
PROCESS FUGITIVE		13.5			

* EMISSION UNIT - PROVIDE THE NAME AND FLOW DIAGRAM DESIGNATION OF THE EMISSION UNIT AS IT APPEARS ON THE DATA AND INFORMATION FORM.

**OTHER - ANY HAZARDOUS AIR POLLUTANT (HAP) NOT INCLUDED ELSEWHERE, E.G., CHLORINE, HCl, ETC.

6) SUBTOTAL	183.2	167.9	1,264.9	1,197.4	1.1/12.1/96.7

7) FUGITIVE		13.5			

8) TOTAL	*A*	*B*	*C*	*D*	*E*
	183.2	181.4	1,264.9	1,197.4	1.1/12.1/96.7

9) GRAND TOTAL - ADD BOXES ***A*** THROUGH ***E*** (TONS/YR):	2,936.8
10) CALCULATED PERMIT FEE - IF GRAND TOTAL IN ITEM 9 ABOVE IS > 100 TONS/YR THEN MULTIPLY GRAND TOTAL BY $13.50 AND ENTER, OTHERWISE ENTER $1,000.00: REV FEE: $18.00/TON	52,862.61
11) MINIMUM PERMIT FEE IS $1,000.00 PER YEAR - MAXIMUM PERMIT FEE IS $100,000.00 PER YEAR. IF THE CALCULATED PERMIT FEE IN ITEM 10 ABOVE IS BETWEEN THESE TWO FEE AMOUNTS THEN ENTER HERE, OTHERWISE ENTER THE MINIMUM OR MAXIMUM PERMIT FEE, WHICHEVER IS APPLICABLE. THIS IS THE ACTUAL ANNUAL PERMIT FEE:	52,862.61

BUNGE MILLING, INC.
Facility ID 183020ABT

25-Aug-05

EMISSIONS INVENTORY REPORT WORKSHEET

YEAR- MAX

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
PEUG1 Corn & Soybean Receiving, Cleaning and Storage								
	Base emissions on 1999 PM test on 5012-0005-0021 filter exhaust.			0.0017	gr/acf			
	Base emissions on 2000 PM10 test on 4880-0034-0069 filter exhaust.			0.00085	gr/acf			
	Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.			0.00060	gr/acf			
Pre NSPS								
5012-0001-0016	301-02	1	TRUCK DUMP #1	8760	APM 40072.10	18,500	1.2	
5012-0002-0012	310-01	6	NORTH ST TRUCK DUMP #2	8760	DD 484RF12	20,000	1.3	
5012-0007-0015	304-03	7	SCTN D & E TRANS GEN ASP	8760	APM 40192.10	34,000	2.1	
5012-0010-0054	301-05	9	HOFFMAN BLDG 301 VAC	8760	HOFFMAN 48X96	1,000	0.1	
5012-0005-0029	301-01	10	WEST HDHS TRANS GEN ASP	8760	DD 484RF12	55,000	3.4	
5012-0003-0013	311-03	11	RHOMBO TRUCK DUMP #3	8760	APM SJL156-6	14,500	0.9	
5012-0004-0016	304-02	132	RAIL DUMP	8760	APM 41120.12	27,000	1.7	
5012-0009-0009	311-01	230	RHOMBO WEST GEN ASP	8760	APM SJL72-6	6,800	0.4	
5012-0003-0018	311-02	231	RHOMBO GALLERY GEN ASP	8760	APM SJL72-6	9,200	0.6	
5012-0010-0047			TRACK 6 VACUUM	8760	HOFFMAN	700	0.04	
4870-0013-0015	110-08	23	CLEANINGS DISCHARGE	8760	BUHLER 16S-6-30	1,900	0.04	
4750-0029-0015	201-08	99	CONVEYING GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.24	
5012-0000-0000			GRAIN RECEIVING FUGITIVES	8760	-	-	see fug total	
NSPS								
5012-0005-0021	301-04	8	TRUCK DUMP #4 & W GAL GEN ASP	8760	DD 484RF12	36,017	2.3	
4870-0013-0001	110-09	24	CLEANING NORTH APM	8760	APM 41216.12	41,000	1.3	
4880-0034-0069	115-02		CORN CLEANING	8760	TD 484RF12	57,372	1.8	
					Subtotal	330,589	17.4	
PEUG2 Dry Corn Milling, Processing and Products Handling								
	Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.			0.00060	gr/acf			
	Base emissions on 2000 PM10 test on 4880-0034-0077 filter exhaust.			0.00060	gr/acf			
4870-0010-0055	110-04	19	BEMIS BAGGING	8760	APM 16019.8	1,660	0.04	
4870-0010-0030	110-05	20	BAGGING GEN ASP	8760	APM 40020.8	3,400	0.08	
4870-0013-0019	110-07	22	BAGGING PACKER GEN ASP	8760	APM 14042.8	4,400	0.1	
4880-0042-0057	109-04	213	BRAN DRYER PROCESS	8760	APM 14036.8	2,200	0.05	
4880-0042-0062	109-03	214	BRAN SIFTER PROCESS	8760	APM 10144.8	6,215	0.1	
4880-0034-0054	109-02	215	EAST MEAL DRY/COOL	8760	APM 40120.10	13,000	0.3	
4880-0034-0059	109-01	216	WEST MEAL DRY	8760	APM 40144.8	13,295	0.3	
4880-0034-0035	105-06	217	S APM BINNING	8760	APM 41144.12	30,000	0.7	
4880-0034-0027	105-05	218	8TH FR DRACCO SCREENING	8760	DRACO 6MB-60	42,000	0.9	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4880-0034-0001	105-04	219	9TH FR DRACCO SCREENING	8760	DRACO 8MB-72	69,500	1.6	
4880-0032-0052	105-03	220	BLDG 105 VACUUM	8760	HOFFMAN	1,500	0.03	
4870-0021-0001	104-02	221	BULK LOADING WHITE GOODS	8760	DD 484RF12	36,000	0.8	
4870-0015-0016	104-01	222	BLDG 104 VACUUM	8760	HOFFMAN 38405A	1,500	0.03	
4880-0042-0054	103-06	223	BRAN BIN	8760	BUHLER 16S-6-30	980	0.02	
4880-0008-0028	103-05	224	6TH FLR SCREENING	8760	WIEDENMANN 2X4 LF150-1200	10,000	0.2	
4880-0008-0040	103-04	225	W 4TH FLR GRAVITY TABLES	8760	WIEDENMANN 2X5 LF225-2250	10,000	0.2	
4880-0034-0010	101-05	226	S LUNCHROOM SCREENING	8760	CD 484RF12	42,000	0.9	
4880-0034-0042	101-04	227	S CD SCREENING	8760	CD 484RF12	37,500	0.8	
4880-0034-0048	101-02	228	N CD GEN ASPIRATION	8760	CD 484RF12	30,000	0.7	
4880-0034-0019	101-01	229	N LUNCHROOM SCREENING	8760	CD 484RF12	36,000	0.8	
4870-0013-0024	115-01		PACKAGE & BULK LOADING	8760	TD 484RF12	42,000	0.9	
4880-0034-0077	115-03		CAMAS/BRAN	8760	TD 484RF12	45,021	1.0	
4880-0034-0071	115-04		THRU & TAIL STOCK DRYERS	8760	TD 484RF12	56,000	1.25	
4880-0032-0070	115-05		BLDG 115 VACUUM	8760	HOFFMAN	825	0.02	
4870-0005-0003			TRACK 2 UNLOAD SEC REC	8760	USS INC.	440	0.01	
4880-0009-0005			GERM GEN ASP	8760	APM 16030.4			
4932-0001-0001	348-01	87	LAB FILTER	8760	APM 14106.4	900	0.1	
4900-0003-0039	112-12A	70	AB FIN PROD SURGE NORTH	8760	MICROPUL 8B	742	0.02	
4900-0003-0045	112-12B	70	AB FIN PROD SURGE SOUTH	8760	MICROPUL 8B	742	0.02	
4990-0005-0012	112-13A	71	1/2 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0005-0042	112-13B	71	1/2 PULVOCRON VISC FLOUR REC	8760	BUHLER 9-6-100	380	0.01	
4990-0002-0010	112-13C	71	3/4 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0004-0013	112-14A	72	9/10 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0003-0010	112-14B	72	7/8 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0002-0019	112-15A	73	#3 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0002-0022	112-15B	73	#4 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0001-0039	112-15B	73	#5 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0021	112-15C	73	#1 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0024	112-15D	73	#2 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0003-0019	112-18A	75	#7 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0003-0022	112-18B	75	#8 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0022	112-18C	75	#9 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0025	112-18D	75	#10 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0002-0008	112-19A	76	3/4 PULVN GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0005-0010	112-19B	76	1/2 PULV GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0004-0011	112-20A	77	9/10 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0003-0008	112-20B	77	7/8 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0005-0028	112-21A	78	1/2 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0002-0026	112-21B	78	3/4 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0003-0026	112-22A	79	7/8 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0004-0029	112-22B	79	9/10 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0006-0024	112-27	83	HIBOND VISC FLAKE ROLLER MILL	8760	APM 15066.8	7,200	0.16	
4820-0001-0029	103-01		CSM BLENDED FOOD REC	8760	APM 40070.7	4,077	0.09	
4820-0001-0052	103-02		BLENDED FOOD PACK	8760	APM 16150.6	10,000	0.22	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4900-0001-0068	111-01		ALLBOND VISC FLOUR GEN ASP	8760	BUHLER 16-8-100	867	0.02	
4820-0003-0007	111-03		MILK BINS	8760	MICROPUL 6B	400	0.01	
4990-0007-0049	111-04		300 SERIES BINNING	8760	MICROPUL 1F1	4,452	0.10	
4990-0001-0002	111-07		SOY MEAL GEN ASP	8760	APM 16022.4	1,435	0.03	
4990-0001-0006	111-08		SOY MEAL SURGE	8760	MICROPUL 6B	500	0.01	
4990-0001-0025	111-10		MEAL BIN COOLER	8760	APM 400072.10	9,158	0.20	
4990-0002-0043	111-12		3/4 SOY FLOUR REC	8760	APM16014.8	700	0.02	
4820-0003-0072	111-13		TRI CAL BINS	8760	APM 16009.8	780	0.02	
4900-0001-0058	111-14A		5/6 ALLOND REC	8760	APM 16014.8	1,100	0.02	
4990-0003-0032	111-14B		7/8 SOY FLOUR REC	8760	APM 16014.8	1,100	0.02	
4990-0002-0033	111-15A		BIN 308	8760	MICROPUL 6B	500	0.01	
4820-0002-0072	111-15B		BIN 509	8760	MICROPUL 6B	500	0.01	
4820-0002-0068	111-15C		BIN 508	8760	MICROPUL 6B	500	0.01	
4820-0003-0038	111-15D		BIN 310	8760	MICROPUL 6B	500	0.01	
4990-0002-0036	111-15E		BIN 309	8760	MICROPUL 6B	500	0.01	
4990-0004-0037	111-17		9/10 PULVICRON REC	8760	BUHLER 16-6-220	700	0.02	
4820-0002-0038	111-18		MILK BINS	8760	MICROPUL 21-6-220	807	0.02	
4820-0002-0035	111-19		MILK BIN BAG DUMP	8760	APM 14048.6	6,000	0.13	
4990-0007-0029	111-21		BLENDING BATCH BIN GEN ASP	8760	BUHLER 25S-6-30	1,250	0.03	
4990-0007-0036	111-22		BLENDER GEN ASP	8760	BUHLER 16S-6-30	1,055	0.02	
4990-0007-0032	111-23		BLENDING GEN ASP	8760	MICROPUL 36S-8-30	1,645	0.04	
4820-0003-0063	111-24		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	3,200	0.07	
4820-0003-0059	111-25		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	2,739	0.06	
4990-0006-0040	111-27		GEN ASPIRATION	8760	BUHLER 9-8-220	742	0.02	
4900-0001-0091	111-28		#5 SL GEN ASP & #5 EXPANDER	8760	APM 14024.6	3,000	0.07	
4990-0011-0001	111-29		FIBER REC GEN ASP	8760	BUHLER 9-8-220	648	0.01	
4820-0002-0011	111-30		PCM BINNING	8760	MICROPUL 1F1	2,241	0.05	
4870-0010-0005	111-34		CF BRAN PACKING BINNING	8760	MICROPUL 25-8-220	1,232	0.03	
4900-0005-0035	111-36		BLDG 111 VACUUM	8760	HOFFMAN 60X120	1,500	0.03	
4870-0006-0006	111-37		110/210 REC GEN ASP	8760	APM 16030.4	1,400	0.03	
4990-0011-0029	111-38		FIBER REC GEN ASP	8760	APM 16019.4	1,000	0.02	
4990-0001-0099	111-41		COOLING TOWER	8760	APM 40072.10	14,000	0.31	
4820-0003-0022	111-42		INGREDIENT BIN 601	8760	MICROPUL 4B	210	0.00	
4820-0003-0026	111-43		INGREDIENT BIN 602	8760	MICROPUL 4B	210	0.00	
4820-0003-0030	111-44		INGREDIENT BIN 603	8760	MICROPUL 2 1/2 B	210	0.00	
4820-0003-0034	111-45		INGREDIENT BIN 604	8760	APM 15105.4	210	0.00	
4820-0003-0018	111-46		MICRO INGR DUMP FILTER	8760	APM 15105.4	2,500	0.06	
4820-0003-0004	111-47		MIXER GEN ASP	8760	BUHLER 25S-6-30	1,500	0.03	
4900-0001-0065	112-03		3/4 HAMMERMILL	8760	APM 16009.6	1,258	0.03	
4900-0001-0006	112-04		#3 & #4 EXPANDERS	8760	APM 16009.6	1,017	0.02	
4900-0005-0001	112-05		REPROCESS GEN CD ROOF	8760	CD 376RF10	27,550	0.62	
4900-0001-0042	112-08		#6 PULV GRINDER	8760	BUHLER 37-8-220	2,904	0.06	
4900-0001-0046	112-09		5/6 PULV AB FIN PROD SURGE BIN	8760	MICROPUL 4B	570	0.01	
4900-0002-0032	112-10		PELLET BINS	8760	BUHLER 16S-6-30	705	0.02	
4900-0003-0017	112-11A		#1 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0020	112-11B		#2 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0023	112-11C		#3 PCM GRIND	8760	APM 16022.8	2,143	0.05	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4900-0003-0026	112-11D		#4 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0029	112-11E		#5 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4990-0006-0027	112-11F		VISCOSITY FLOUR REC	8760	APM 16022.8	2,143	0.05	
4990-0011-0010	112-17		COND RECEIVER/SOY MEAL GRIND	8760	APM 16014.8	1,350	0.03	
4900-0005-0007	112-24		GRIND REJECT/SCRAP BIN	8760	MICROPUL 2 1/2B	500	0.01	
4900-0005-0029	112-29		BLDG 112 VACUUM	8760	HOFFMAN	500	0.01	
4900-0001-0030	112-30		AB GRIND SURGE BIN	8760	BUHLER 37-8-220	2,100	0.05	
4900-0005-0006	112-31		N DAY GEN ASP & #5 EXPANDER	8760	CD 484RF12	36,000	0.81	
4820-0001-0093			BLENDED FOODS FILTER	8760	DD 124RF10	5,080	0.11	
4750-0029-0027	202-01	109	ROUND BIN GEN ASP	8760	APM 14072.6	7,134	0.16	
4912-0002-0054	209-01	116	HOMINY TRUCK LDOUT ASP	8760	DD 484RF12	37,000	0.83	
4860-0018-0007	208-05	119	N HOMINY FEED	8760	MICROPUL	14,000	0.31	
4860-0018-0003	208-06	123	S HOMINY FEED	8760	MICROPUL	15,000	0.34	
4860-0022-0017	208-15	133	SEC CLEAN GRINDING	8760	APM	2,000	0.04	
4860-0024-0003	208-12	177	BRAN DRYER	8760	CORONA CYCLONE	6,888	1.42	
4912-0006-0017	203-02	180	TRACK 16 BULK RAIL LDOUT	8760	WEIDENMAN LFT 2X7	30,000	0.67	
4860-0017-0073	202-07	181	FLAKING GEN ASP	8760	AERODYNE 7500 SVC	16,000	0.36	
4860-0023-0001	201-02	182	GERM DUSTERS ASP	8760	APM 40120.8	7,400	0.17	
4860-0017-0003	201-12		GERM DRYER	8760	CYCLONE	10,000	2.06	
4860-0017-0072			GERM ROLLS ASPIRATION	8760	CYCLONE	5,000	1.03	
4860-0019-0003	208-11	124	FTS DRYER ASPIRATION	8760	CORONA 15 CYCLONE	6,888	1.42	
4860-0024-0037	208-04	117	PET BRAN KICE LITES ASP	8760	MICROPUL	1,600	0.04	
4860-0017-0026			BIN 945 GERM RECEIVER	8760	BUHLER 36S-6-30	1,800	0.04	
					Subtotal	921,130	26.0	
PEUG3 CORN OIL EXTRACTION								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	**0.0055**	**gr/acf**			
4861-0006-0005	204-02	179	CORN EXTRACTOR, DISTILLATION, DT	8760	MIN OIL ABSORBER	132	MACT hex loss	354
4861-0003-0018	205-01	141	CORN MEAL DC PLANT #2	8760	MAC CYCLONE	20,000	4.13	
					Subtotal	20,132	4.13	354
PEUG4 SOYBEAN PREPERATION								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	**0.0055**	**gr/acf**			
			General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.	**0.00060**	**gr/acf**			
4750-0038-0003	215-01	134	E-W DRYER	8760	DUCON CYCLONE	10,423	2.15	
4750-0036-0001	215-02	175	E-W BEAN CLEANING ASP/DEHULL	8760	484RF12	36,000	0.81	
4750-0029-0042	201-03	94	6TH FLOOR DEHULL	8760	MICROPUL 100S-6-20	7,400	0.17	
4750-0017-0043	208-17	95	BEAN CONDITIONER	8760	DAY CYCLONE	5,000	1.03	
4750-0018-0043	208-18	98	FLAKER ASP FLAKING SYSTEM	8760	DAY CYCLONE	12,000	0.27	
4912-0008-0006	202-03	111	BLDG 201/202 VACUUM	8760	HOFFMAN	700	0.02	
4912-0009-0005	208-09	121	BLDG 208 VACUUM	8760	HOFFMAN	700	0.02	
4750-0029-0074	201-20		HULLS GENERAL ASPIRATION	8760	DONALDSON	21,000	0.47	
4860-0019-0003	208-11	124	FTS DRYER	8760	CORONA 15 CYCLONE	6,888	0.15	
					Subtotal	100,111	5.08	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
PEUG5 SOYBEAN OIL EXTRACTION								
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			**0.0055**	**gr/acf**			
4750-0007-0004	204-01	136	SOLVENT EXT SOLVENT RECLAIM	8760	MIN OIL ABSORBER	132	MACT hex loss	838
4750-0002-0018	210-01	135	MEAL DRY & COOL CYCLONE #1	8760	DAY CYCLONE	18,000	3.72	
4750-0002-0020	210-01	135	MEAL DRY & COOL CYCLONE #2	8760	DAY CYCLONE	18,000	3.72	
4750-0002-0022	210-01	135	MEAL DRY & COOL CYCLONE #3	8760	DAY CYCLONE	18,000	3.72	
4750-0002-0024	210-01	135	MEAL DRY & COOL CYCLONE #4	8760	DAY CYCLONE	18,000	3.72	
					Subtotal	72,132	14.87	838
PEUG6 SOYBEAN PRODUCTS MILLING AND HANDLING								
	General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.			**0.00060**	**gr/acf**			
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			**0.0055**	**gr/acf**			
4750-0029-0032	201-01	92	MEAL BINNING	8760	APM 40240.8	30,000	0.67	
4750-0029-0001	201-10	101	MEAL GRIND GEN ASP	8760	APM 40224.4	21,000	0.47	
4750-0023-0017	202-02	110	KAOLIN/CALCIUM BIN REC	8760	APM 16050.8	2,600	0.06	
4912-0004-0022	225-01	126	TRUCK MEAL LOADOUT	8760	376RF8	34,960	0.78	
4912-0003-0011	226-01	127	RAIL MEAL LOADOUT #1	8760	376RF12	34,960	0.78	
4750-0029-0061	212-02	128	MEAL BINNING	8760	WEIDENMAN	15,640	0.35	
4750-0033-0001	234-01	130	LTMS & RAIL MEAL TRANSFER	8760	376RF8	20,000	0.45	
4750-0033-0011	234-02	130	LTMS & RAIL MEAL LOADOUT	8760	MAC 144MCF416	34,600	0.77	
4750-0025-0015	201-19		HULL PELLET COOLER	8760	MAC HE 39	8,000	2.55	
4750-0029-0045			MEAL SCREENER GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.17	
4750-0033-0011			LTMS TRUCK/RAIL DUMP	75,000 tons	-	-	see fug total	
4750-0033-0000			LTMS TRUCK LOADOUT	75,000 tons	-	-	see fug total	
4912-0000-0000			MEAL LOADOUT FUGITIVES	8760	-	-	see fug total	
					Subtotal	209,360	7.1	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
BOILER HOUSE								
			General: Base emissions on best estimate.	0.005	gr/acf			
			Coal receiving:	0.02	#/ton received			
FM-26		143	F&M PACKAGE BOILER	8,760	LOW NOx			
CFB BOILER		144	CFB FLUIDIZED BED BOILER	8,760	BAGHOUSE & NOx Red			
F-1000			COAL RECEIVING FUGITIVES	8,760	fugitives		1.61	
F-109			COAL CRUSHER FUGITIVES	8,760	fugitives		0.00	
F-1001			ASH LOADOUT FUGITIVES		fugitives		0.33	
CP-104			REINJECTION BIN	8,760	M2	5,500	1.03	
F-104			COAL BUNKER	8,760	M3	5,500	1.03	
F-105			LIMESTONE SILO	8,760	M4	5,500	1.03	
F-103			COAL SILO	8,760	M5	5,500	1.03	
F-101			FLY ASH SILO	8,760	M6	5,500	1.03	
CP-104A			SYSTEM C STORAGE	8,760	M7	5,500	1.03	
F-108			COAL HANDLING	8,760	F-108	11,200	2.10	
DG-100		152	EMERGENCY GENERATOR	39				
TK-108		153	FUEL OIL TANK	8,760				
					Subtotal	44,200	10.2	

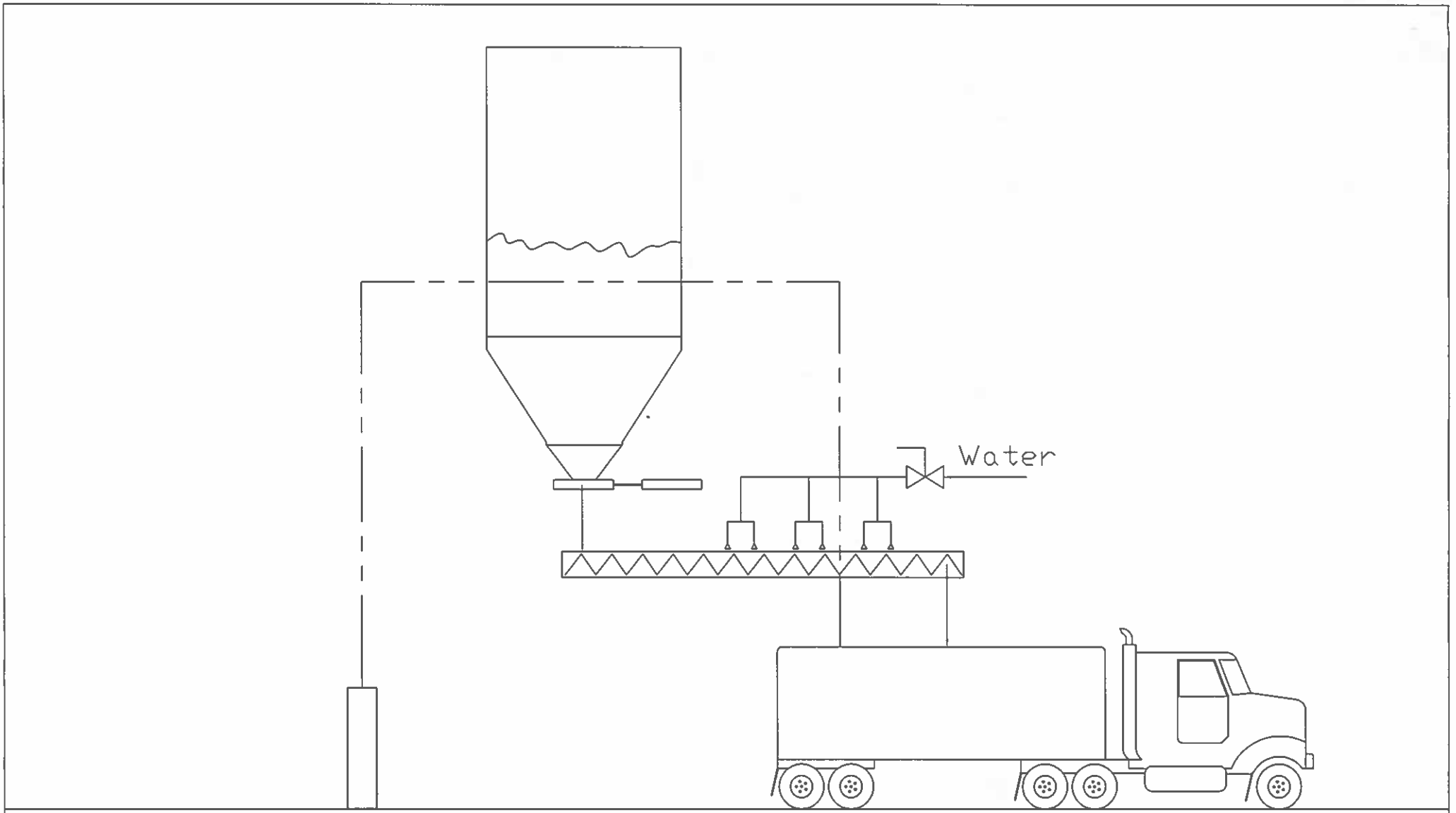
TOTAL PLANT

	PM10 ton/year	SO2 ton/year	NOx ton/year	NMVOC ton/year	CO ton/year	Pb ton/year	HAPS n-hexane ton/year	HAPS HF ton/year	HAPS HCl ton/year
process sources	74.5	0	0	0.0	0	0	0		
solvent extraction	0	0	0	1192	0	0	738.9		
		0	0	0	0	0	0		
CFB	83.23	1264.94	183.22	5.6	48.44	1.07	0	12.08	96.67
FM	0.00	0.00	0.00	0.00	0.00	0	0		
fuel handling	10.2	0	0	0	0	0	0		
TOTAL PLANT	167.9	1,264.9	183.2	1,197.4	48.4	1.1	738.9	12.1	96.7

TOTAL PLANT	2,923.4
PROCESS FUGITIVE	13.5
GRAND TOTAL	2,936.8

FEE $18.00 PER TON

ANNUAL FEE $52,862.61



REVISIONS			
NO.	REMARKS	DATE	BY

COGEN ASH LOADING

BUNGE MILLING
DANVILLE, ILLINOIS

JOB
DRAWN ALS
DATE 4/30/2015
DRVG. 4856

PLOT SCALE 1 = 1

217/782-2113

CONSTRUCTION PERMIT - NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Phil Huffman
321 East North street
Danville, Illinois 61832

Application No.: 06030003 I.D. No.: 183020ABT
Applicant's Designation: Date Received: March 1, 2006
Subject: Modification to Truck Dump #2
Date Issued: June 23, 2006
Location: 321 East North Street, Danville, Vermilion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of modifications of Truck Dump #2, which is controlled by the existing Truck Pit Filter, and construction of a new elevator dust storage bin, which will be controlled by the existing West Headhouse Filter, as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit authorizes modification of Truck Dump #2 with construction of a new pit bucket elevator and enclosed conveyors, replacing the existing systems, and alteration of the truck receiving pit and shed by making them larger.

b. This permit is issued based on the modifications to Truck Dump #2, as identified in Condition 1(a), being made to reduce grain unloading time without any throughput increase at the grain processing operations at this source.

2. This permit does not relax requirements for emissions testing, monitoring, recordkeeping, and reporting associated with Truck Dump #2, as established in the current Clean Air Act Permit Program (CAAPP) permit issued for the source.

3. After modification, Truck Dump #2, including associated grain handling operations, will become the affected facilities subject to the New Source Performance Standards (NSPS) for Grain Elevators, 40 CFR 60 Subpart DD. Pursuant to the NSPS:

a. Process emission of particulate matter (PM) from Truck Pit Filter and West Headhouse Filter shall not exceed 0.023 gr/dscm (0.01 gr/dscf) and 0 percent opacity. [40 CFR 60.302(b)]

b. Fugitive PM emissions from Truck Dump #2 shall not exhibit opacity greater than 5 percent. [40 CFR 60.302(c)(1)]

c. Fugitive PM emissions from grain handling operation shall not exhibit opacity greater than 0 percent. [40 CFR 60.302(c)(2)]

d. At all times, the Permittee shall, maintain and operate the affected facility, including associated control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.11(d)].

4a. The emission units at Truck Dump #2 are subject to 35 IAC 212.123, which provides that no person shall cause or allow the opacity from emission units to exceed 30 percent.

b. The emission units at Truck Dump #2 are subject to 35 IAC 212.301, which provides that no person shall not cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith (that is, looking at the sky directly overhead) from a point beyond the property line of the source.

c. Pursuant to 35 IAC 212.461(b), the Permittee shall implement required housekeeping practices and maintain a housekeeping check list for the grain handling operations. This checklist shall contain the applicable housekeeping practices described in the attached "Minimum Recommendations for Housekeeping Practices for Grain Handling Facilities."

5a. This Permit is issued based on the modifications to Truck Dump #2 not being a major modification subject to the PSD rules for emissions of PM because they will not be accompanied by a significant increase in the amount of grain handled by the dump pit on annual basis and will not be accompanied by a significant increase in PM emissions, as defined under the PSD rules.

b. The Permittee shall, for a period of 10 years following resumption of regular operation after modifications are made, operate Truck Dump #2 in such a manner that it does not experience a significant increase in emissions of PM and qualify as a major modification for PM.

6a. Within 60 days of achieving the maximum production rate for modified Truck Dump #2, but not later than 180 days after initial startup after modification, the Permittee shall conduct a performance test for PM and opacity in accordance with the requirements of the NSPS, pursuant to 40 CFR 60.8 and 60.303.

b. The following methods and procedures shall be used for measurements:

PM	Method 5 or 17, 40 CFR 60, Appendix A
Opacity	USEPA Method 9, 40 CFR 60, Appendix A

c. The Illinois EPA shall be notified prior to these measurements to enable the Illinois EPA to observe these measurements. Notification of the expected date of the measurements shall be submitted to a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of measurement shall be submitted a minimum of five working days prior to the actual date of the measurement. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe the measurements.

d. Three copies of final reports for these tests shall be forwarded to the Compliance Section in Springfield within 15 days after the test results are compiled and finalized. The final report from testing shall contain a minimum:

i. A summary of results.

ii. General information.

iii. Detailed description of test conditions, including:

A. Process information, i.e., mode of operation and process rate.

B. Control equipment information, i.e., equipment operating parameters during testing.

iv. Copies of all raw data sheets.

7a. The Permittee shall comply with the recordkeeping requirement of the NSPS, 40 CFR 60.7, for Truck Dump #2.

b. The Permittee shall maintain the following records related to housekeeping inspections for Truck Dump #2:

i. Records of the check lists completed by the grain elevator manager.

ii. Records for the inspections required by Condition 4(c), with date, time and observations if such information is not incorporated in the housekeeping check list.

iii. Records for periodic inspection of emission units and associated pollution control equipment with date, individual performing the inspection, and nature of inspection.

c. The Permittee shall maintain the following records related to emissions of Truck Dump #2:

i. Total grain received at the source (tons/month and tons/year) and estimated receipts handled by Truck dump #2.

ii. A file that contains the PM emission rate of each unit (lb/hour), determined at the maximum operating rate with control devices functioning properly, based on engineering calculations, with supporting documentation.

iii. Records of PM emissions on a monthly basis (tons/month and tons/year) with supporting calculations.

d. The Permittee shall also fulfill the applicable recordkeeping and reporting requirements of the PSD rules, 40 CFR 52.21(r)(6), related to PM emissions of Truck ump #2.

e. The Permittee shall keep a record of all opacity observations that it conducts for Truck Dump #2 using USEPA Method 9, including date, observer, specific locations, raw data, and calculated opacity levels.

8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

9a. The Permittee shall comply with the notification requirements of the NSPS, 40 CFR 60.7, for Truck Dump #2.

b. If there is any deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

10. Two copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
Telephone: 217/782-5811 Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
Telephone: 618/346-5120 Facsimile: 618/346-5155

11. Truck Dump #2 with the changes authorized by this permit may be operated pursuant to this construction permit until a CAAPP Permit is revised or reissued that addresses these changes.

Please note that this permit does not address the replacement of existing baghouse filters for Section D & E Transfer and Rail Dump Aspiration (Source #5012) with a new baghouse filter, because pursuant to 35 IAC 201.146(hhh), this activity does not require a construction permit.

If you have any questions on this permit, please call Kunj Patel at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:CPR:KMP:psj

Enclosure - Housekeeping Check List

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Bunge Milling, Inc.
Attn: Phil Huffman
321 East North Street
Danville, Illinois 61832

Application No.: 06040023 I.D. No.: 183020ABT
Applicant's Designation: Date Received: April 14, 2006
Subject: Hexane Tank 7A
Date Issued: July 20, 2006
Location: 321 East North Street, Danville, Vermillion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of one additional hexane storage tank as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit authorizes the Permittee to convert an existing 30,000 gallon tank previously used for propane storage into a hexane storage tank, Tank 7A, venting through a condenser and mineral oil absorber system in the existing solvent reclaim system.

b. This permit is issued based on no change in hexane usage by the source as a result of the additional hexane storage capacity.

2a. This permit is issued based on Tank 7A not being subject to 35 IAC 215.121 because the vapor pressure of the material as stored is less than 2.5 psia.

b. This permit is issued based on Tank 7A not being subject to NSPS Subpart Kb because the vapor pressure of the material as stored is less than 15 kPa.

3. The Permittee shall follow good operating practices for the hexane storage tank and associated control system, including periodic inspections, maintenance and prompt repair of defects.

4. This permit is issued based on minimal emissions of volatile organic material (VOM) from the hexane storage tank. For this purpose, emissions shall not exceed 0.5 tons/month and 1.2 tons/year.

5a. This permit does not revise or relax any requirements contained in the CAAPP Permit, permit # 96020027, including emission control requirements for the existing solvent reclaim system and associated requirements for monitoring, recordkeeping or reporting.

b. The Permittee shall keep the records for the hexane storage tank that are required for existing tanks.

6. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request.

7. If there is an exceedance of or deviation from the requirements of this permit as determined by the records required by this permit or by other means, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

8. Two copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

Telephone: 217/782-5811 Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

Telephone: 618/346-5120 Facsimile: 618/346-5155

9. The Permittee is allowed to operate the hexane tank under this construction permit until its CAAPP Permit is next reissued to address this change.

If you have any questions on this, please call Kevin Hecht at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:KTH:psj

cc: Region 2

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Biofuels Company of America, LLC
Attn: Mark A. Burke
321 East North Street
Danville, Illinois 61832

Application No.: 06050053 I.D. No.: 183020ABT
Applicant's Designation: Date Received: May 15, 2006
Subject: Biodiesel Plant
Date Issued: August 30, 2006
Location: 321 East North Street, Danville, Vermillion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a Biodiesel Plant including the units listed in Attachment A and other ancillary operations as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

Section 1: Plant-Wide Conditions

1.1 This permit authorizes construction of a Biodiesel Plant with a nominal design capacity of 60 million gallons/year adjacent to the Permittee's existing soybean and corn oil extraction plant, which will provide vegetable oil feedstock for the Biodiesel Plant.

1.2 a. The Biodiesel Plant shall not process more than 225,000 tons per year of vegetable oil.

b. This permit does not authorize any increase in production at the existing vegetable oil extraction plant.

1.3 a. At all times, the Permittee shall maintain and operate the Biodiesel Plant and associated emission control system in a manner consistent with good air pollution control practice for minimizing emissions.

b. In the event that the operation of the Biodiesel Plant results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to process changes or enhancement of controls or stacks, in order to eliminate the odor nuisance.

1.4 Compliance with annual limits in this permit shall be determined from a running total of 12 months of data.

1.5 All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

1.6 a. Reports of exceedances or deviations from NSPS and NESHAP requirements shall be submitted in accordance with applicable provisions of the NSPS and NESHAP.

b. If there is an exceedance of or deviation from the requirements of this permit that is not addressed by reporting required by the NSPS or NESHAP, the Permittee shall submit a report to the Illinois EPA within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

1.7 Two copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

Telephone: 217/782-5811 Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

Telephone: 618/346-5120 Facsimile: 618/346-5155

1.8 The Permittee is allowed to operate the Biodiesel Plant under this construction permit until the CAAPP Permit is next revised to address this plant.

Section 2: Unit-Specific Conditions

2.1 Process Equipment Venting to a Control Device

2.1.1 Description

The Biodiesel Plant contains a feedstock pretreat process, biodiesel process, methanol tanks, and a sodium methoxide tank all venting to a control system consisting of a condenser, chiller, and absorber. This equipment is used for the transesterification of vegetable oil, using alcohol (methanol) to produce fuel for Diesel engines and glycerol, as a co-product. The vegetable oil and both products have very low vapor pressure, leaving the alcohol and residual hexane in the raw material as the only materials that have a potential for emissions.

2.1.2 Applicable Provisions and Regulations

a. i. The distillation units in the Biodiesel Plant are affected facilities subject to the New Source Performance Standards (NSPS), 40 CFR 60, Subpart NNN, Standards of Performance of Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.

ii. For these affected facilities, the Permittee shall comply with all applicable provisions of 40 CFR 60, Subpart NNN and related requirements in 40 CFR 60, Subpart A, General Provisions.

Note: Pursuant to 40 CFR 60.660(c)(6), an affected facility operated with a vent stream flow rate less than 0.008 scm/min (0.2825 scfm) is exempt from all provisions of Subpart NNN except for the test method and procedure and the recordkeeping and reporting requirements in 40 CFR 60.664(g) and 60.665(i), (l)(5) and (o).

b. The reactor processes in the Biodiesel Plant are affected facilities subject to 40 CFR 60, Subpart RRR, NSPS for Volatile Organic Emissions for Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

c. The miscellaneous organic chemical manufacturing process units (MCPU) in the Biodiesel Plant, as defined by 40 CFR 63.2550, are affected sources subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing, 40 CFR 63 Subpart FFFF, for which the compliance date is November 11, 2006. The MCPU in the Biodiesel Plant shall comply with the applicable requirements of the NESHAP for process vents.

2.1.3 Operational and Production Limits and Work Practices

a. All equipment containing methanol, mixtures of other materials with methanol or in contact with methanol including biodiesel pretreat, biodiesel process, methanol tanks, and the sodium methoxide tank in the Biodiesel Plant shall be vented to the central VOM/HAP emission control system.

b. The VOM/HAP control system shall achieve at least 98 percent control for emissions of HAPs and VOM.

2.1.4 Emission Limitations

The stack emissions of volatile organic material (VOM) from the Biodiesel Plant shall not exceed 6.37 pounds/hour and 7.4 tons/year. These limits are based on maximum production rates and at least 98% control by the emission control system.

2.1.5 Testing Requirements

a. Within 180 days of initial startup, the stack VOM and HAP (hexane and methanol) emissions of the Biodiesel Plant (control system stack) shall be measured during conditions which are representative of maximum emissions.

b. The following methods and procedures shall be used for testing of emissions, unless the Illinois EPA approves use of other USEPA Reference method: Refer to 40 CFR 60, Appendix A, for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
VOM and HAPs	USEAP Method 18 and Method 25 or 25A (if outlet VOM cont. < 50 ppmv as C Non CH4)

c. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA. This plan shall describe the specific procedures for testing, including as a minimum:

i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum

emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.

iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.

iv. The test method(s), which will be used, with the specific analysis method, if the method can be used with different analysis methods.

v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.

vi. The format and content of the Source Test Report.

d. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of thirty days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.

e. Copies of the Final Report(s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized. The Final Report shall include as a minimum:

i. A summary of results.

ii. General information.

iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

iv. Detailed description of test conditions, including:

A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption; and

B. Control equipment information, i.e., equipment condition and operating parameters during testing.

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

2.1.6 Emissions Monitoring Requirements

The Permittee shall monitor (i.e., measure and automatically record) the following information for each condenser/chiller/absorber in the control system:

a. Coolant flow rate (gallons/minute, 3 hour average); and

b. Coolant/adsorbent outlet temperature (3 hour average).

2.1.7 Recordkeeping Requirements

a. The Permittee shall fulfill applicable recordkeeping requirements of the NESHAP and NSPS referenced in this permit.

b. The Permittee shall keep a file with the design information and engineering calculations for the efficiency of the control system for VOM and HAP (methanol) emissions.

c. The Permittee shall maintain logs of inspection, maintenance, and repairs for the Biodiesel Plant and associated control system that, at a minimum shall identify measures taken as good air pollution control practice.

d. The Permittee shall maintain records of the following items:

i. Amount of vegetable oil used (tons/month and tons/year);

ii. Amount of alcohol (methanol) used (tons/month and tons/year by type, i.e., reactant or contained in catalyst);

iii. HAP content of vegetable oil (% by weight); and

iv. VOM and HAP emissions with supporting calculations (tons/month and tons/year).

2.1.8 Reporting

a. The Permittee shall fulfill all applicable notification and reporting requirements of the NESHAP and NSPS for the units in the Biodiesel Plant.

2.2 Valves, Pumps and Other Components

2.2.1 Description

The Biodiesel Plant includes pumps, valves, flanges and other components that emit VOM when they leak. These emissions are minimized by design and routine maintenance of such components and by a formal Leak Detection and Repair Program.

2.2.2 Applicable Provisions and Regulations

a. The group of equipment, as defined by 40 CFR 60.481, in the Biodiesel Plant is an affected facility subject to 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing Industry.

b. i. The miscellaneous organic chemical manufacturing process units (MCPU) in the Biodiesel Plant, as defined by 40 CFR 63.2550, are affected sources subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing, 40 CFR 63 Subpart FFFF, for which the compliance date is November 11, 2006.

ii. The Permittee shall comply with the applicable provisions of this NESHAP. Compliance with NSPS Subpart VV can be achieved by complying with the requirements of NESHAP Subpart FFFF.

2.2.3 Emission Limitations

Emissions of VOM from the Biodiesel Plant other than stack emissions shall not exceed nominal emission rates of 16.3 tons/year, total. Emissions shall be determined using appropriate emission estimation methodology developed by USEPA or other commonly accepted methodology for estimation of emissions.

2.2.4 Recordkeeping Requirements

The Permittee shall maintain the following records related to leaking components:

a. The Permittee shall fulfill applicable recordkeeping requirements of the NSPS, including maintain the following records:

i. Records identifying units that are subject to the NSPS, i.e., are in VOC service.

ii. Records identifying subject units that are not in heavy liquid service.

iii. Records documenting performance of required leak monitoring.

iv. Records for other leaks, which are identified by means other than monitoring.

v. Records documenting timely repair of leaks and performance of follow-up monitoring.

b. The Permittee shall keep records on at least an annual basis of the VOM and HAP emissions attributable to affected components, with supporting documentation and calculations.

2.2.5 Reporting Requirements

The Permittee shall fulfill all applicable notification and reporting requirements of the NSPS for the affected components.

2.2.6 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to repair and replace components without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102.

2.3 Boiler

2.3.1 Description

The Biodiesel Plant boiler will be used to provide steam for the process. The boiler fires natural gas as the primary fuel and biodiesel as the secondary fuel.

2.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Boiler	Natural Gas and Biodiesel Fired Boiler, nominal capacity 34 million Btu/hour	None

2.3.3 Applicable Provisions and Regulations

a. An "affected boiler" for the purpose of these unit-specific conditions, is the boiler described in Conditions 2.3.1 and 2.3.2.

b. The affected boiler is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD and related provisions in 40 CFR 63, Subpart A, General Provisions. The Illinois EPA is administering NESHAP in Illinois on behalf of the United States under a delegation agreement.

i. The emission of carbon monoxide from the affected boiler shall not exceed 400 ppm by volume on dry basis corrected to 3 percent oxygen (3-run average).

ii. At all times, the Permittee shall maintain and operate the affected boiler in a manner consistent with good air pollution practices for minimizing emissions.

c. The affected boiler is subject to the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subparts A and Dc. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

d. The affected boiler is subject to 35 IAC 212.123, which provides that no person shall cause or allow the emissions of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit.

e. The affected boiler is subject to 35 IAC 216.121, which provides that no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source to exceed 200 ppm, corrected to 50 percent excess air.

f. When firing biodiesel, the affected boiler is subject to 35 IAC 212.206 which provides that no person shall cause or allow the emission of particulate matter into the

atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

2.3.4 Non-Applicability of Regulations of Concern

None

2.3.5 Operational and Production Limits and Work Practices

a. The affected boiler shall only be fired by natural gas or biodiesel as the fuel.

b. The affected boiler shall have a firing rate not to exceed 33.9 million Btu/hour.

c. The natural gas usage of the affected boiler shall not exceed 297 million ft^3/yr.

d. The biodiesel usage of the affected boiler shall not exceed 2.32 million gallons/yr.

2.3.6 Emission Limitations

a. i. Emissions from the affected boiler shall not exceed the following limits:

Emissions	
NO_x (Tons)	CO (Tons)
28.3	12.5

ii. Compliance with these limits shall be determined from a running total of monthly data using appropriate emission factors, including, in order of preference, appropriate factors from source-specific emission testing, the boiler supplier or USEPA published emission factors.

b. This permit is issued based on minimal emissions of VOM, SO_2, and PM/PM_{10} from the affected boiler. For this purpose, emissions shall not exceed 3 tons of each pollutant.

2.3.7 Testing Requirements

Testing requirements are not set for the affected boiler.

2.3.8 Emissions Monitoring Requirements

Emissions monitoring requirements are not set for the affected boiler.

2.3.9 Recordkeeping Requirements

a. The Permittee shall record and maintain records of the amount of fuel combusted in the affected boiler during each day [40 CFR 60.48c(g)].

b. The Permittee shall maintain a file containing the rated firing rate of the affected boiler, with supporting documentation.

c. The Permittee shall maintain records of the NOx and CO emissions from the affected boiler (tons/month and tons/year).

2.3.10 Reporting Requirements

The Permittee shall fulfill all applicable notification and reporting requirements of the NSPS for the affected boiler.

2.4 Biodiesel Loadout

2.4.1 Description

The Biodiesel Plant includes a new tank truck loading rack used for biodiesel loadout.

2.4.2 Non-Applicability of Regulations of Concern

The loading rack is not subject to the provisions of 35 IAC 215.122, Loading Operations, because the vapor pressure of the material being handled is less than the applicability threshold.

2.4.3 Operational and Production Limits and Work Practices

a. The Permittee shall not load any material with a vapor pressure that exceeds 0.039 psia through this loading rack.

b. The Permittee shall operate, maintain, and repair the loading rack in accordance with good air pollution control practices to minimize emissions.

2.4.4 Emission Limitations

Emissions of VOM from the loading rack shall not exceed 0.74 tons/year. Emissions shall be determined using appropriate emission estimation methodology developed by USEPA or other commonly accepted methodology for estimation of emissions.

2.4.6 Recordkeeping Requirements

a. The Permittee shall maintain logs of the operation and maintenance of the loading rack.

b. The Permittee shall keep records of the VOM emissions from the loading rack.

2.5 Support Equipment

2.5.1 Description

The Biodiesel Plant utilizes support equipment, such as the wastewater clarifier, tanks storing acid, alkali, glycerol, filter aid, silica, fatty acid, feedstock and soapstock, which handle low-vapor pressure materials, which are not vented to the control system.

2.5.2 Operational Practices

At all times, the Permittee shall maintain and operate all support equipment in a manner consistent with good air pollution control practice for minimizing emissions.

2.5.3 Emissions

This permit is issued based on negligible emissions from each piece of support equipment. For this purpose, emissions shall not exceed nominal emission rates of 0.4 tons/year.

2.6 Roadways And Other Sources Of Fugitive Dust

2.6.1 Description

Fugitive dust/particulate matter emissions are generated by vehicle traffic on roadways and parking lots at the plant.

2.6.2 List of Emission Units and Pollution Control Measures

Operation	Description	Control Measure
Fugitive Dust	Plant Roads and Parking Lots and Vehicle Traffic	Paving and Sweeping

2.6.3 Applicable Regulations

a. The "affected operations" for the purpose of these unit-specific conditions are the operations described in Condition 2.6.1 and 2.6.2.

b. Visible emissions of fugitive particulate matter from any process, including material handling or storage activity,

shall not be present beyond the property line of the source, pursuant to 35 IAC 212.301. (See also Condition 1.3(a))

2.6.4 Non-Applicability of Regulations of Concern

a. The affected operations are not subject to the requirements of 35 IAC 212.321 ("the process weight rate" rule) because of the disperse nature of these emissions units. [35 IAC 212.323]

2.6.5 Operational and Production Limits and Work Practices

The Permittee shall follow good air pollution control practices to minimize fugitive dust from roadways, parking areas, and other open areas of the Biodiesel Plant. These practices shall provide for pavement on all regularly traveled parking areas, roadways, entrances and exits to the plant to the public streets and treatment (sweeping, application of water, use of dust suppressant, etc.) of roadways and areas that are routinely subject to vehicle traffic as necessary to prevent nuisance emissions of dust.

2.6.6 Emission Limitations

Emissions of PM from the affected operations shall not exceed 8.8 tons per year, as determined by use of appropriate USEPA methodology for estimating emissions of fugitive dust.

2.6.7 Testing Requirements

None

2.6.8 Monitoring Requirement

None

2.6.9 Recordkeeping Requirements

The Permittee shall maintain the following records with respect to the affected operations:

a. A file documenting assumptions about the quantity and nature of vehicle traffic at the Biodiesel Plant as related to production.

b. Records documenting implementation of fugitive dust control measures, including:

i. For each dust control treatment of roadways: the identity of the roadways controlled, the type of treatment, and identification of vehicle.

ii. A log recording incidents when control measures were not carried out as scheduled or were not fully implemented and incidents when additional control measures were carried out, with description of each such incident and explanation. This log shall address any adjustments to the scheduling of control measures made by the Permittee due to weather conditions that either acted to reduce or increase the level of potential dust, such as precipitation or extended periods of dry weather.

c. Records on at least an annual basis of the PM emissions from the affected operations, with supporting documentation and calculations.

2.6.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA of any deviations from the requirements of this permit for the affected operations.

If you have any questions on this, please call Kevin Hecht at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:KTH:psj

cc: Region 3

ATTACHMENT A

Listing of Identified Emission Units in the Biodiesel Plant

Condition	Operation	Emission Unit/Process Equipment	Emission Control Equipment
2.1	Process Equipment and Tanks	Biodiesel Pretreat	Control Train Consisting of Condenser/Chiller/ Absorber
		Biodiesel Process	
		Methanol Tanks	
		Sodium Methoxide Tank	
2.2	Piping Components	Pumps, Valves, and Flanges	Leak Detection and Repair Program
2.3	Process Heat	Boiler	Good Combustion Practices
2.4	Biodiesel Loadout	Racks	None
2.5	Support Equipment	Hydrogen Chloride Storage Tank	None
		Sodium Hydroxide Storage Tank	
		Sodium Hydroxide Dosing Tank	
		Phosphoric Acid Storage Tank	
		Filter Aid Storage Bin	
		Silica Storage Bin	
		Wastewater Treatment	
		Citric Acid	
		Biodiesel Tanks	
		Glycerine Tanks	
		Free Fatty Acid	
		Spent Filter Cake	
		Degummed Soybean Oil	
		PFD Feedstock Tank	
		Refined Feedstock Tank	
		Soapstock Storage Tank	
2.6	Fugitive Dust	Plant Roads and Parking Lots and Vehicle Traffic	Paving and Sweeping

KTH:psj

CAAPP Permit Revision Checklist

SECTION 1: ADMINISTRATIVE REVIEW - Completed by Records Unit		
SOURCE NAME: Bunge Grain Milling Inc.		REVIEWED BY:
ID NUMBER: 183020AAT	PERMIT NUMBER: 96020027	DATE RECEIVED: 6/23/10

GENERAL REQUIREMENTS		
1) Does the Source have an issued CAAPP permit? If no, application is not a CAAPP permit revision, do not use this form.	☑ YES	☐ NO
2) Was a 273-CAAPP form submitted? If yes, application is an administrative permit amendment.	☐ YES	☒ NO
3) Was a 271-CAAPP form submitted? If yes, application is a minor permit modification.	☒ YES	☐ NO
4) Was a 200-CAAPP form submitted? If yes, application is a significant permit modification.	☐ YES	☒ NO

SECTION 2: CAAPP SPECIALIST REVIEW - Completed by CAAPP Specialist		
CAAPP SPECIALIST: MTR	DATE COMPLETED: 11/24/10	DATE DUE: / /

DETERMINATION OF TYPE OF REVISION Note, that either a 273-CAAPP, 271-CAAPP, or 200-CAAPP must be submitted.		
5) What type of revision is the application? ALREADY OPEN FOR RENEWAL.	☐ ADMINISTRATIVE ☑ MINOR ☐ SIGNIFICANT	
6) Was the proper CAAPP form submitted for this type of application? If yes cannot be checked, proceed to question 8.	☑ YES	☐ NO
7) Has a "responsible official", as defined in the Act, signed the application? If yes, give to CAAPP Unit Manager for assignment.	☑ YES	☐ NO
8) Was the applicant contacted to inform them to submit the prper CAAPP form? Date Contacted: / / Date Form Received: / /	☐ YES N/A	☐ NO

SECTION 3: TECHNICAL REVIEW - Completed by Engineer		
REVIEWING ENGINEER:	DATE COMPLETED: / /	DATE DUE: / /

ADMINISTRATIVE PERMIT AMENDMENT Note, formal public or USEPA notice not required.		
9) Has permit been revised and final action taken within 60 days?	☐ YES	☐ NO
10) Has a copy of the revised CAAPP permit been submitted to the USEPA?	☐ YES	☐ NO
MINOR PERMIT MODIFICATION Note, formal public notice other than notifying affected states not required.		
11) Has Brad Frost been provided with a final permit to notify the affected states and USEPA within 5 days of a completed application?	☐ YES	☐ NO
12) Has the 45-day USEPA comment period been completed?	☐ YES	☐ NO
13) Has the permit been revised and final action taken within 90 days, or 15 days after the USEPA's 45 day review period, whichever is later?	☐ YES	☐ NO
SIGNIFICANT PERMIT MODIFICATION	☐ YES	☐ NO
14) Has the application gone through the standard CAAPP public notice procedures?	☐ YES	☐ NO
15) Has the 45-day USEPA comment period been completed?	☐ YES	☐ NO
16) Has the permit been revised and final action taken within 9 months?	☐ YES	☐ NO

BUNGE

Enhancing the Value of America's Harvest[SM]

June 14, 2010

LeeAnne Kinsella
Permit Section, CAAPP Group
Illinois Environmental Protection Agency
Division of Air Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62702

Bunge North America, Inc.
321 E. North Street, Danville
ID No. 183020ABT
CAAPP Permit
Minor Title V Permit Modification Application

Dear Ms. Kinsella:

Please find enclosed two copies of an application package for a minor modification to the CAAPP permit for our Bunge – Danville, Illinois facility. The facility currently has an operating permit Application No. 96020027.

The enclosed application is submitted for the following reasons:
1. Eliminate certain sources from the permit,
2. Eliminate permit conditions applicable to the eliminated sources,
3. Change the names of several sources which change does not increase potential or actual emissions, and
4. Reduce the permitted emissions resulting from 1 above.

If you have any questions about this permit application package, please do not hesitate to contact Bob Henricks at (314) 292-2342, email robert.henricks@bunge.com.

Sincerely,
Bunge North America, Inc.

Dean Hughes
Eastern Regional Manager - Milling

Enclosure: Application original and 1 copy

p.c.: Aric Silver, corp. file

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL – PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

APPLICATION FOR MODIFICATION TO A CAAPP PERMIT	**FOR AGENCY USE ONLY**
(CHECK ONLY ONE)	ID NO.:
☐ SIGNIFICANT MODIFICATION	PERMIT NO.:
X MINOR MODIFICATION	DATE:

SECTION ONE — SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2) SOURCE ID NO.: 183020ABT

3) DATE FORM PREPARED: 6/8/2010

SECTION TWO — INSTRUCTIONS IN BRIEF

1) COMPLETE THE FOLLOWING FORM WHEN APPLYING FOR A SIGNIFICANT OR MINOR MODIFICATION.

2) PROVIDE COMPLETED FORMS FOR THE AGENCY TO USE TO NOTIFY USEPA AND AFFECTED STATES AS REQUIRED UNDER SUBSECTIONS 8 AND 9 OF 39.5 OF THE ENVIRONMENTAL PROTECTION ACT. (COMPLETION OF THIS FORM FULFILLS THIS REQUIREMENT.)

3) FOR A CHANGE TO A COMBINED TITLE I/CAAPP PERMIT USING THE TITLE I/TITLE V PERMIT PROCESS, A SIGNIFICANT OR MINOR MODIFICATION REQUEST THAT WILL REVISE EXISTING APPLICABLE PERMIT CONDITIONS, A *T1R REQUEST*, OR ESTABLISH NEW CONDITIONS, A *T1N REQUEST*, WILL ADDITIONALLY NEED TO INCLUDE WITH THIS REQUEST A COMPLETED "REQUEST FOR A TITLE 1 INCORPORATION INTO THE CAAPP: T1, T1 REVISED (T1R), AND/OR T1 NEW (T1N)" FORM 283-CAAPP.

4) A SIGNIFICANT MODIFICATION REQUEST WILL REQUIRE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64 FOR EMISSION UNITS WITH POST-CONTROL EMISSIONS GREATER THAN OR EQUAL TO THE MAJOR SOURCE THRESHOLD.

5) THE APPLICATION SHOULD INCLUDE A DESCRIPTION OF THE PROPOSED CHANGE(S), ANY PHYSICAL CHANGES IN EQUIPMENT, CHANGES IN THE METHOD OF OPERATION, CHANGES IN EMISSIONS, AND ANY NEW APPLICABLE REQUIREMENTS WHICH WILL APPLY AS A RESULT OF THE PROPOSED CHANGE.

6) TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE THIS FORM FOR A SIGNIFICANT MODIFICATION. TO DECREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE A 273-CAAPP "REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT".

7) REFER TO 271-CAAPP INSTRUCTIONS FOR FURTHER GUIDANCE ON COMPLETING THIS FORM.

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____
AUTHORIZED SIGNATURE

Dean Hughes
TYPED OR PRINTED NAME OF SIGNATORY

Eastern Regional Manager - Milling
TITLE OF SIGNATORY

06 / 14 / 2010
DATE

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE

APPLICATION PAGE 1ER

SECTION THREE	MODIFICATION INFORMATION		
	PERMIT MODIFICATION RATIONALE		
	WHY IS THE APPLICANT APPLYING FOR A MODIFICATION? (CHECK ALL THAT APPLY)	YES	NO
1)	THE APPLICANT REQUESTS TO CHANGE A CURRENT TITLE 1 LIMIT OR OTHER LIMIT.	☐	☐
2)	THE APPLICANT REQUESTS TO INCORPORATE A NEW OR MODIFIED RULE.	☐	☐
3)	THE APPLICANT REQUESTS TO INCORPORATE A CONSTRUCTION PERMIT.	☐	☐
4)	THE APPLICANT REQUESTS TO CHANGE PERMIT REQUIRMENTS (E.G., MONITORING, RECORDKEEPING, REPORTING, ETC.).	☐	☐
5)	THE APPLICANT REQUESTS TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES.	☐	☐
6)	THE APPLICANT REQUESTS TO MODIFY A COMPLIANCE PROCEDURE.	☐	☐
7)	OTHER (DESCRIBE): Change of source names, delete sources and decrease permitted emission levels	X	☐
	FOR MINOR PERMIT MODIFICATION		
	IF REQUESTING A MINOR PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
8)	WOULD THE REQUEST VIOLATE ANY APPLICABLE REQUIREMENT?	☐	X
9)	WOULD THE REQUEST INVOLVE SIGNIFICANT CHANGES TO EXISTING MONITORING, REPORTING, OR RECORDKEEPING REQUIREMENTS IN THE PERMIT?	☐	X
10)	WOULD THE REQUEST REQUIRE A CASE-BY-CASE DETERMINATION OF AN EMISSION LIMITATION OR OTHER STANDARD, OR A SOURCE-SPECIFIC DETERMINATION OF AMBIENT IMPACTS, OR A VISIBILITY OR INCREMENT ANALYSIS?	☐	X
11)	WOULD THE REQUEST SEEK TO ESTABLISH OR CHANGE A PERMIT TERM OR CONDITION FOR WHICH THERE IS NO CORRESPONDING UNDERLYING REQUIREMENT AND WHICH AVOIDS AN APPLICABLE REQUIREMENT TO WHICH THE SOURCE WOULD OTHERWISE BE SUBJECT?	☐	X
12)	WOULD THE REQUEST BE A MODIFICATION UNDER ANY PROVISION OF TITLE I OF THE CLEAN AIR ACT?	☐	X
13)	WOULD THE REQUEST BE REQUIRED TO BE PROCESSED AS A SIGNIFICANT MODIFICATION? NOTE: PURSUANT TO 39.5(14) PERMIT MODIFICATIONS, IF THE APPLICANT ANSWERED "YES" TO ANY OF THE ABOVE QUESTIONS 8-13, THE MODIFICATION IS NOT CONSIDERED A MINOR PERMIT MODIFICATION AND WILL NEED TO BE SUBMITTED AS A SIGNIFICFANT MODIFICATION, PROCEED TO QUESTIONS 18-22.	☐	X
	DOES THE MINOR PERMIT MODIFICATION APPLICATION INCLUDE THE FOLLOWING:		
14)	A DESCRIPTION OF THE CHANGE, THE EMISSIONS RESULTING FROM THE CHANGE, AND ANY NEW APPLICABLE REQUIREMENTS THAT WILL APPLY IF THE CHANGE OCCURS?	X	☐
15)	THE SOURCE'S SUGGESTED DRAFT PERMIT (E.G., REDLINE, TRACKED CHANGES VERSION)?	X	☐
16)	A CERTIFICATION BY A RESPONSIBLE OFFICIAL THAT THE PROPOSED MODIFICATION MEETS THE CRITERIA FOR USE OF MINOR PERMIT MODIFICATION PROCEDURES (E.G., THE SIGNATURE AT THE TOP OF THIS FORM)?	X	☐
17)	UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION REQUEST, WILL THE SOURCE COMPLY WITH BOTH THE APPLICABLE REQUIREMENTS GOVERNING THE CHANGE AND THE PROPOSED PERMIT TERMS AND CONDITIONS? NOTE: UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION, THE SOURCE NEED NOT COMPLY WITH THE EXISTING PERMIT TERMS AND CONDITIONS IT SEEKS TO MODIFY.	X	☐
	FOR SIGNIFICANT PERMIT MODIFICATION		
	IF REQUESTING A SIGNIFICANT PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
18)	THE PERMIT MODIFICATION WOULD NOT QUALIFY AS EITHER MINOR PERMIT MODIFICATION OR AS ADMINISTRATIVE PERMIT AMENDMENTS?	☐	☐
19)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WILL REQUIRE A SIGNIFICANT CHANGE IN EXISTING MONITORING TERMS OR CONDITIONS?	☐	☐
20)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION FOR A RELAXATION OF REPORTING OR RECORDKEEPING REQUIREMENTS?	☐	☐
21)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WOULD REQUIRE DECISIONS TO BE MADE ON TECHNICALLY COMPLEX ISSUES?	☐	☐
22)	IF A MODIFICATION CHANGES OR EFFECTS PREVIOUSLY SUBMITTED INFORMATION (E.G., ALTERING ESTABLISHED MONITORING), DOES THIS APPLICATION INCLUDE A REVISED 200-CAAPP AND OTHER ASSOCIATED DATA OR FORMS NEEDED TO DOCUMENT THE REQUEST?	☐	☐

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation:
_____

REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT	FOR AGENCY USE ONLY
	ID NUMBER:
	PERMIT #:
	DATE:

GENERAL INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2a) ID NUMBER (IF KNOWN):	b) CAAPP PERMIT NUMBER:
183020ABT	96020027
3) ENVIRONMENTAL CONTACT PERSON: Aric Silver	4) CONTACT PERSON'S TELEPHONE NUMBER: 217-443-9784

AMENDMENT DATA

5) AN ADMINISTRATIVE PERMIT AMENDMENT SHALL ONLY BE USED FOR ONE OR MORE OF THE FOLLOWING REVISIONS TO A CAAPP PERMIT (PLEASE INDICATE THE TYPE OF AMENDMENT(S)):

☐ A) CORRECTS TYPOGRAPHICAL ERRORS;

☐ B) IDENTIFIES A CHANGE IN THE NAME, ADDRESS, OR PHONE NUMBER OF ANY PERSON IDENTIFIED IN THE PERMIT, OR PROVIDES A SIMILAR MINOR ADMINISTRATIVE CHANGE AT THE SOURCE;

☐ C) REQUIRES MORE FREQUENT MONITORING OR REPORTING BY THE PERMITTEE; OR

☐ D) ALLOWS FOR A CHANGE IN OWNERSHIP OR OPERATIONAL CONTROL OF THE SOURCE WHERE NO OTHER CHANGE IN THE PERMIT IS NECESSARY, PROVIDED THAT A WRITTEN AGREEMENT CONTAINING A SPECIFIC DATE FOR TRANSFER OF PERMIT RESPONSIBILITY, COVERAGE, AND LIABILITY BETWEEN THE CURRENT AND NEW PERMITTEES HAS BEEN SUBMITTED TO THE ILLINOIS EPA.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

AMENDMENT DATA (CON'T)

6) DESCRIPTION OF REQUESTED ADMINISTRATIVE PERMIT AMENDMENT:

	CURRENT PERMIT INFORMATION	AMENDED PERMIT INFORMATION
1)	Specific source names	Revised source names
	PEUG3	Delete from the permit
2)	PEUG4	Revise unit name
	PEUG5	Delete from the permit
3)	PEUG6	Revise unit name
	Boiler House/Grounds	Delete CFB Boiler and support systems (coal, limestone & ash) from the permit
4)		
5)		
6)		
7)		
8)		

7) DOES THE APPLICATION INCLUDE A COPY OF THOSE PARTICULAR PAGES OF THE CAAPP PERMIT WHICH ARE CLEARLY MARKED TO SHOW THE REQUESTED AMENDMENT? YES ☐ YES ☐ NO

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

8) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____
AUTHORIZED SIGNATURE

Dean Hughes
TYPED OR PRINTED NAME OF SIGNATORY

Eastern Regional Manager - Milling
TITLE OF SIGNATORY

06 / 14 / 2010
DATE

APPLICATION PAGE _4ER___

Printed on Recycled Paper
273-CAAPP

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation:

SUPPLEMENT TO CAAPP APPLICATION	FOR AGENCY USE ONLY
	ID NUMBER:
	PERMIT #:
	DATE:

THIS FORM SHALL ACCOMPANY ANY SUPPLEMENT TO A CAAPP APPLICATION, THAT IS, ANY SUBMITTAL OF NEW OR CORRECTED INFORMATION FOR A PENDING CAAPP APPLICATION.

SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2) DATE FORM PREPARED: May 20, 2010

3) SOURCE ID NO. (IF KNOWN): 183020ABT

SUPPLEMENT INFORMATION

4) DOES THIS SUPPLEMENT PROVIDE ADDITIONAL INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF NEW PAGES IN THIS SUPPLEMENT: _____

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	NEW PAGE #(S)
Elimination of solvent extraction and coal-fired boiler system		
and support facilities (coal. limestone & ash material handling)		
271CAAPP		1ER - 2ER
273CAAPP		3ER & 4ER
292CAAPP		5ER & 6ER
505CAAPP		7ER & 8ER
EMISSIONS SPREADSHEET		9ER - 22ER
Marke-up of curent permit - submitted electronically		

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE

APPLICATION PAGE 7ER

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505-CAAPP

5) DOES THIS SUPPLEMENT CORRECT PREVIOUSLY SUBMITTED INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF REVISED PAGES IN THE SUPPLEMENT: _____

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	OLD PAGE #(S)	NEW PAGE #(S)
SEE CROSSED OUT UNIT SOURCE NAMES			
ON TITLE V MOD 2010 MAX PERMITTED			
EMISSIONS SPREADSHEET.			
ALSO, NEW OR CHANGED UNIT SOURCE			
NAMES ARE UNDERLINED.			
CROSSED OUT UNIT SOURCE NAMES			
ARE REQUESTED TO BE REMOVED FROM			
THE PERMIT. (EXAMPLE: "CFB FLUIDIZED			
BED BOILER" IS TO BE REMOVED FROM			
THE PERMIT.)			

SIGNATURE BLOCK

6) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION, AS AMENDED BY THIS SUPPLEMENT, ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____ (AUTHORIZED SIGNATURE)

Eastern Regional Manager - Milling (TITLE OF SIGNATORY)

Dean Hughes (TYPED OR PRINTED NAME OF SIGNATORY)

06 / 14 / 2010 (DATE)

APPLICATION PAGE 8ER

Printed on Recycled Paper
505-CAAPP

BUNGE MILLING, INC.
Facility ID 183020ABT

8-Jun-10

EMISSIONS INVENTORY REPORT
WORKSHEET

YEAR- MAX

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
PEUG1 Corn & Soybean Receiving, Cleaning and Storage								
			Base emissions on 1999 PM test on 5012-0005-0021 filter exhaust,	0.0017	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0069 filter exhaust,	0.00085	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust,	0.00060	gr/acf			
Pre NSPS								
5012-0001-0016	301-02	1	TRUCK DUMP #1	8760	APM 40072.10	18,500	1.2	
5012-0010-0054	301-05	9	HOFFMAN BLDG 301 VAC	8760	HOFFMAN 48X96	1,000	0.1	
5012-0005-0029	301-01	10	WEST HDHS TRANS GEN ASP	8760	DD 484RF12	55,000	3.4	
5012-0003-0013	311-03	11	RHOMBO TRUCK DUMP #3	8760	APM SJL156-6	14,500	0.9	
5012-0004-0016	304-02	132	RAIL DUMP	8760	APM 41120.12	27,000	1.7	
5012-0009-0009	311-01	230	RHOMBO WEST GEN ASP	8760	APM SJL72-6	6,800	0.4	
5012-0003-0018	311-02	231	RHOMBO GALLERY GEN ASP	8760	APM SJL72-6	9,200	0.6	
5012-0010-0047			TRACK 6 VACUUM	8760	HOFFMAN	700	0.04	
4870-0013-0015	110-08	23	CLEANINGS DISCHARGE	8760	BUHLER 16S-6-30	1,900	0.04	
4750-0029-0015	201-08	99	CONVEYING GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.24	
5012-0000-0000			GRAIN RECEIVING FUGITIVES	8760	-	-	5.4	
NSPS								
5012-0005-0021	301-04	8	TRUCK DUMP #4 & W GAL GEN ASP	8760	DD 484RF12	36,017	2.3	
4870-0013-0001	110-09	24	CLEANING NORTH APM	8760	APM 41216.12	41,000	1.3	
4880-0034-0069	115-02		CORN CLEANING	8760	TD 484RF12	57,372	1.8	
5012-0002-0012	310-01	6	NORTH ST GRAIN/MEAL TRUCK DUMP #2	8760	DD 484RF12	20,000	1.3	
					Subtotal	276,589	19.4	
PEUG2 Dry Corn Milling, Processing and Products Handling								
			Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust,	0.00060	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0077 filter exhaust,	0.00060	gr/acf			
4870-0010-0055	110-04	19	BEMIS BAGGING	8760	APM 16019.8	1,660	0.04	
4870-0010-0030	110-05	20	BAGGING GEN ASP	8760	APM 40020.8	3,400	0.08	
4870-0013-0019	110-07	22	BAGGING PACKER GEN ASP	8760	APM 14042.8	4,400	0.1	
4880-0042-0057	109-04	213	BRAN DRYER PROCESS	8760	APM 14036.8	2,200	0.05	
4880-0042-0062	109-03	214	BRAN SIFTER PROCESS	8760	APM 10144.8	6,215	0.1	
4880-0034-0054	109-02	215	EAST MEAL DRY/COOL	8760	APM 40120.10	13,000	0.3	
4880-0034-0059	109-01	216	WEST MEAL DRY	8760	APM 40144.8	13,295	0.3	
4880-0034-0035	105-06	217	S APM BINNING	8760	APM 41144.12	30,000	0.7	
4880-0034-0027	105-05	218	8TH FR DRACCO SCREENING	8760	DRACO 6MB-60	42,000	0.9	
4880-0034-0001	105-04	219	9TH FR DRACCO SCREENING	8760	DRACO 8MB-72	69,500	1.6	
4880-0032-0052	105-03	220	BLDG 105 VACUUM	8760	HOFFMAN	1,500	0.03	
4870-0021-0001	104-02	221	BULK LOADING WHITE GOODS	8760	DD 484RF12	36,000	0.8	
4870-0015-0016	104-01	222	BLDG 104 VACUUM	8760	HOFFMAN 38405A	1,500	0.03	
4880-0042-0054	103-06	223	BRAN BIN	8760	BUHLER 16S-6-30	980	0.02	
4880-0008-0028	103-05	224	6TH FLR SCREENING	8760	WIEDENMANN 2X4 LF150-1200	10,000	0.2	
4880-0008-0040	103-04	225	W 4TH FLR GRAVITY TABLES	8760	WIEDENMANN 2X5 LF225-2250	10,000	0.2	
4880-0034-0010	101-05	226	S LUNCHROOM SCREENING	8760	CD 484RF12	42,000	0.9	
4880-0034-0042	101-04	227	S CD SCREENING	8760	CD 484RF12	37,500	0.8	
4880-0034-0048	101-02	228	N CD GEN ASPIRATION	8760	CD 484RF12	30,000	0.7	
4880-0034-0019	101-01	229	N LUNCHROOM SCREENING	8760	CD 484RF12	36,000	0.8	
4870-0013-0024	115-01		PACKAGE & BULK LOADING	8760	TD 484RF12	42,000	0.9	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4880-0034-0077	115-03		CAMAS/BRAN	8760	TD 484RF12	45,021	1.0	
4880-0034-0071	115-04		THRU & TAIL STOCK DRYERS	8760	TD 484RF12	56,000	1.25	
4880-0032-0070	115-05		BLDG 115 VACUUM	8760	HOFFMAN	825	0.02	
4870-0005-0003			TRACK 2 UNLOAD SEC REC	8760	USS INC.	440	0.014	
4880-0009-0005			GERM GEN ASP	8760	APM 16030.4			
4932-0001-0001	348-01	87	LAB FILTER	8760	APM 14106.4	900	0.1	
4900-0003-0039	112-12A	70	AB FIN PROD SURGE NORTH	8760	MICROPUL 8B	742	0.02	
4900-0003-0045	112-12B	70	AB FIN PROD SURGE SOUTH	8760	MICROPUL 8B	742	0.02	
4990-0005-0012	112-13A	71	1/2 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0005-0042	112-13B	71	1/2 PULVOCRON VISC FLOUR REC	8760	BUHLER 9-6-100	380	0.01	
4990-0002-0010	112-13C	71	3/4 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0004-0013	112-14A	72	9/10 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0003-0010	112-14B	72	7/8 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0002-0019	112-15A	73	#3 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0002-0022	112-15B	73	#4 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0001-0039	112-15B	73	#5 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0021	112-15C	73	#1 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0024	112-15D	73	#2 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0003-0019	112-18A	75	#7 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0003-0022	112-18B	75	#8 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0022	112-18C	75	#9 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0025	112-18D	75	#10 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0002-0008	112-19A	76	3/4 PULVN GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0005-0010	112-19B	76	1/2 PULV GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0004-0011	112-20A	77	9/10 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0003-0008	112-20B	77	7/8 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0005-0028	112-21A	78	1/2 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0002-0026	112-21B	78	3/4 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0003-0026	112-22A	79	7/8 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0004-0029	112-22B	79	9/10 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0006-0024	112-27	83	HIBOND VISC FLAKE ROLLER MILL	8760	APM 15066.8	7,200	0.16	
4820-0001-0029	103-01		CSM BLENDED FOOD REC	8760	APM 40070.7	4,077	0.09	
4820-0001-0052	103-02		BLENDED FOOD PACK	8760	APM 16150.6	10,000	0.22	
4900-0001-0068	111-01		ALLBOND VISC FLOUR GEN ASP	8760	BUHLER 16-8-100	867	0.02	
4820-0003-0007	111-03		MILK BINS	8760	MICROPUL 6B	400	0.01	
4990-0007-0049	111-04		300 SERIES BINNING	8760	MICROPUL 1F1	4,452	0.10	
4990-0001-0002	111-07		SOY MEAL GEN ASP	8760	APM 16022.4	1,435	0.03	
4990-0001-0006	111-08		SOY MEAL SURGE	8760	MICROPUL 6B	500	0.01	
4990-0001-0025	111-10		MEAL BIN COOLER	8760	APM 400072.10	9,158	0.20	
4990-0002-0043	111-12		3/4 SOY FLOUR REC	8760	APM16014.8	700	0.02	
4820-0003-0072	111-13		TRI CAL BINS	8760	APM 16009.8	780	0.02	
4900-0001-0058	111-14A		5/6 ALLOND REC	8760	APM 16014.8	1,100	0.02	
4990-0003-0032	111-14B		7/8 SOY FLOUR REC	8760	APM 16014.8	1,100	0.02	
4990-0002-0033	111-15A		BIN 308	8760	MICROPUL 6B	500	0.01	
4820-0002-0072	111-15B		BIN 509	8760	MICROPUL 6B	500	0.01	
4820-0002-0068	111-15C		BIN 508	8760	MICROPUL 6B	500	0.01	
4820-0003-0038	111-15D		BIN 310	8760	MICROPUL 6B	500	0.01	
4990-0002-0036	111-15E		BIN 309	8760	MICROPUL 6B	500	0.01	
4990-0004-0037	111-17		9/10 PULVICRON REC	8760	BUHLER 16-6-220	700	0.02	
4820-0002-0038	111-18		MILK BINS	8760	MICROPUL 21-6-220	807	0.02	
4820-0002-0035	111-19		MILK BIN BAG DUMP	8760	APM 14048.6	6,000	0.13	
4990-0007-0029	111-21		BLENDING BATCH BIN GEN ASP	8760	BUHLER 25S-6-30	1,250	0.03	
4990-0007-0036	111-22		BLENDER GEN ASP	8760	BUHLER 16S-6-30	1,055	0.02	
4990-0007-0032	111-23		BLENDING GEN ASP	8760	MICROPUL 36S-8-30	1,645	0.04	
4820-0003-0063	111-24		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	3,200	0.07	
4820-0003-0059	111-25		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	2,739	0.06	
4990-0006-0040	111-27		GEN ASPIRATION	8760	BUHLER 9-8-220	742	0.02	
4900-0001-0091	111-28		#5 SL GEN ASP & #5 EXPANDER	8760	APM 14024.6	3,000	0.07	
4990-0011-0001	111-29		FIBER REC GEN ASP	8760	BUHLER 9-8-220	648	0.01	
4820-0002-0011	111-30		PCM BINNING	8760	MICROPUL 1F1	2,241	0.05	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4870-0010-0005	111-34		CF BRAN PACKING BINNING	8760	MICROPUL 25-8-220	1,232	0.03	
4900-0005-0035	111-36		BLDG 111 VACUUM	8760	HOFFMAN 60X120	1,500	0.03	
4870-0006-0006	111-37		110/210 REC GEN ASP	8760	APM 16030.4	1,400	0.03	
4990-0011-0029	111-38		FIBER REC GEN ASP	8760	APM 16019.4	1,000	0.02	
4990-0001-0029	111-41		COOLING TOWER	8760	APM 40072.10	14,000	0.31	
4820-0003-0022	111-42		INGREDIENT BIN 601	8760	MICROPUL 4B	210	0.00	
4820-0003-0026	111-43		INGREDIENT BIN 602	8760	MICROPUL 4B	210	0.00	
4820-0003-0030	111-44		INGREDIENT BIN 603	8760	MICROPUL 2 1/2 B	210	0.00	
4820-0003-0034	111-45		INGREDIENT BIN 604	8760	APM 15105.4	210	0.00	
4820-0003-0018	111-46		MICRO INGR DUMP FILTER	8760	APM 15105.4	2,500	0.06	
4820-0003-0004	111-47		MIXER GEN ASP	8760	BUHLER 25S-6-30	1,500	0.03	
4900-0001-0065	112-03		3/4 HAMMERMILL	8760	APM 16009.6	1,258	0.03	
4900-0001-0006	112-04		#3 & #4 EXPANDERS	8760	APM 16009.6	1,017	0.02	
4900-0005-0001	112-05		REPROCESS GEN CD ROOF	8760	CD 376RF10	27,550	0.62	
4900-0001-0042	112-08		#6 PULV GRINDER	8760	BUHLER 37-8-220	2,904	0.06	
4900-0001-0046	112-09		5/6 PULV AB FIN PROD SURGE BIN	8760	MICROPUL 4B	570	0.01	
4900-0002-0032	112-10		PELLET BINS	8760	BUHLER 16S-6-30	705	0.02	
4900-0003-0017	112-11A		#1 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0020	112-11B		#2 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0023	112-11C		#3 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0026	112-11D		#4 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0029	112-11E		#5 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4990-0006-0027	112-11F		VISCOSITY FLOUR REC	8760	APM 16022.8	2,143	0.05	
4990-0011-0010	112-17		COND RECEIVER/SOY MEAL GRIND	8760	APM 16014.8	1,350	0.03	
4900-0005-0007	112-24		GRIND REJECT/SCRAP BIN	8760	MICROPUL 2 1/2B	500	0.01	
4900-0005-0029	112-29		BLDG 112 VACUUM	8760	HOFFMAN	500	0.01	
4900-0001-0030	112-30		AB GRIND SURGE BIN	8760	BUHLER 37-8-220	2,100	0.05	
4900-0005-0006	112-31		N DAY GEN ASP & #5 EXPANDER	8760	CD 484RF12	36,000	0.81	
4820-0001-0093			BLENDED FOODS FILTER	8760	DD 124RF10	5,080	0.11	
4750-0029-0027	202-01	109	ROUND BIN GEN ASP	8760	APM 14072.6	7,134	0.16	
4912-0002-0054	209-01	116	HOMINY TRUCK LDOUT ASP	8760	DD 484RF12	37,000	0.83	
4860-0018-0007	208-05	119	N HOMINY FEED	8760	MICROPUL	14,000	0.31	
4860-0018-0003	208-06	123	S HOMINY FEED	8760	MICROPUL	15,000	0.34	
4860-0022-0017	208-15	133	SEC CLEAN GRINDING	8760	APM	2,000	0.04	
4860-0024-0003	208-12	177	BRAN DRYER	8760	CORONA CYCLONE	6,888	1.42	
4912-0006-0017	203-02	180	TRACK 16 BULK RAIL LDOUT	8760	WEIDENMAN LFT 2X7	30,000	0.67	
4860-0017-0073	202-07	181	FLAKING GEN ASP	8760	AERODYNE 7500 SVC	16,000	0.36	
4860-0023-0001	201-02	182	GERM DUSTERS ASP	8760	APM 40120.8	7,400	0.17	
4860-0017-0003	201-12		GERM DRYER	8760	CYCLONE	10,000	2.06	
4860-0017-0072			GERM ROLLS ASPIRATION	8760	CYCLONE	5,000	1.03	
4860-0019-0003	208-11	124	FTS DRYER ASPIRATION	8760	CORONA 15 CYCLONE	6,888	1.42	
4860-0024-0037	208-04	117	PET BRAN KICE LITES ASP	8760	MICROPUL	1,600	0.04	
4860-0017-0026			BIN 945 GERM RECEIVER	8760	BUHLER 36S-6-30	1,800	0.04	
					Subtotal	921,130	26.0	
~~PEUG3 CORN OIL EXTRACTION~~								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	0.0055	gr/acf			
~~4861-0006-0005~~	~~204-02~~	~~179~~	~~CORN EXTRACTOR, DISTILLATION, DT~~	~~8760~~	~~MIN OIL ABSORBER~~	0	MACT hex loss	0
~~4861-0003-0018~~	~~205-01~~	~~141~~	~~CORN MEAL DC PLANT #2~~	~~8760~~	~~MAC CYCLONE~~	0	0.00	
					Subtotal	0	0.00	0
PEUG4 SOYBEAN PREPERATION CORN MILL PRODUCT STORAGE								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	0.0055	gr/acf			
			General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.	0.00060	gr/acf			
~~4750-0038-0003~~	~~215-01~~	~~134~~	~~E-W DRYER~~	~~8760~~	~~DUCON CYCLONE~~	0	0.00	
~~4750-0036-0001~~	~~215-02~~	~~176~~	~~E-W BEAN CLEANING ASP/DEHULL~~	~~8760~~	~~484RF12~~	0	0.00	
~~4750-0029-0042~~	~~201-03~~	~~94~~	~~6TH FLOOR DEHULL~~	~~8760~~	~~MICROPUL 100S-6-20~~	0	0.00	
~~4750-0017-0043~~	~~208-17~~	~~95~~	~~BEAN CONDITIONER~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
~~4750-0018-0043~~	~~208-18~~	~~98~~	~~FLAKER ASP FLAKING SYSTEM~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
4912-0008-0006	202-03	111	BLDG 201/202 VACUUM	8760	HOFFMAN	700	0.02	
4912-0009-0005	208-09	121	BLDG 208 VACUUM	8760	HOFFMAN	700	0.02	
4750-0029-0074	201-20		~~HULLS GENERAL~~ HOMINY FEED BINS ASPIRATION	8760	DONALDSON 276RFW12	21,000	0.47	
~~4860-0019-0003~~	~~208-11~~	~~124~~	~~FTS DRYER~~	~~8760~~	~~CORONA 15 CYCLONE~~	0	0.00	
					Subtotal	22,400	0.50	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
~~PEUG6 SOYBEAN OIL EXTRACTION~~								
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
~~4750-0007-0004~~	~~204-01~~	~~136~~	~~SOLVENT EXT SOLVENT RECLAIM~~	~~8760~~	~~MIN OIL ABSORBER~~	0	Consent Decree	0
~~4750-0002-0018~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #1~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0020~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #2~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0022~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #3~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0024~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #4~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
					Subtotal	0	0.00	0
PEUG6 ~~SOYBEAN~~ CORN MILL PRODUCTS MILLING AND HANDLING								
	General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.			0.00060	gr/acf			
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
4750-0029-0032	201-01	92	~~MEAL~~ HOMINY BINNING	8760	APM 40240.8	30,000	0.67	
4750-0029-0001	201-10	101	~~MEAL~~ HOMINY GRIND GEN ASP	8760	APM 40224.4	21,000	0.47	
~~4750-0023-0017~~	~~202-02~~	~~110~~	~~KAOLIN/CALCIUM BIN REC~~	~~8760~~	~~APM 16050.8~~	2,600	0.06	
4912-0004-0022	225-01	126	TRUCK ~~MEAL~~ HOMINY LOADOUT	8760	376RF8	34,960	0.78	
4912-0003-0011	226-01	127	RAIL ~~MEAL~~ HOMINY/GRAIN LOADOUT #1	8760	376RF12	34,960	0.78	
~~4750-0029-0061~~	~~212-02~~	~~128~~	~~MEAL BINNING~~	~~8760~~	~~WEIDENMAN~~	15,640	0.35	
4750-0033-0001	234-01	130	LTMS & RAIL HOMINY/GRAIN TRANSFER	8760	376RF8	20,000	0.45	
4750-0033-0011	234-02	130	LTMS & RAIL HOMINY/GRAIN LOADOUT	8760	MAC 144MCF416	34,600	0.77	
4750-0025-0015	201-19		~~HULL~~ FLOUR PELLET COOLER	8760	MAC HE 39	8,000	2.55	
4750-0029-0045			~~MEAL~~ HOMINY SCREENER GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.17	
4750-0033-0000A			LTMS TRUCK/RAIL HOMINY/GRAIN DUMP	75,000 tons	-	-	0.01	
4750-0033-0000B			LTMS TRUCK HOMINY/GRAIN LOADOUT	75,000 tons	-	-	0.4	
4912-0000-0000			~~MEAL~~ HOMINY LOADOUT FUGITIVES	2801	-	-	1.9	
4912-0000-0001			GRAIN LOADOUT FUGITIVES	5867			0.10	
					Subtotal	209,360	9.4	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
BOILER HOUSE/GROUNDS								
			General: Base emissions on best estimate.	0.005	gr/acf			
			Coal receiving:	0.02	#/ton received			
FM-26		143	B&W TYPE FM PACKAGE BOILER	8,760	LOW NOx			
~~CFB BOILER~~		~~144~~	~~CFB FLUIDIZED BED BOILER~~	~~8,760~~	~~BAGHOUSE & NOx Red~~			
~~F-1000~~			~~COAL RECEIVING FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-109~~			~~COAL CRUSHER FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-1001~~			~~ASH LOADOUT FUGITIVES~~		~~fugitives~~		0.00	
~~CP-104~~			~~REINJECTION BIN~~	~~8,760~~	~~M2~~	0	0.00	
~~F-104~~			~~COAL BUNKER~~	~~8,760~~	~~M3~~	0	0.00	
~~F-105~~			~~LIMESTONE SILO~~	~~8,760~~	~~M4~~	0	0.00	
~~F-103~~			~~COAL SILO~~	~~8,760~~	~~M5~~	0	0.00	
~~F-101~~			~~ASH SILO PNEUMATIC RECEIVER~~	~~8,760~~	~~M6~~	0	0.00	
~~F-102~~			~~ASH SILO BINVENT & LOADOUT FILTER~~	~~8,760~~		0	0.00	
~~CP-104A~~			~~SYSTEM C STORAGE~~	~~8,760~~	~~M7~~	0	0.00	
~~F-108~~			~~COAL HANDLING~~	~~8,760~~	~~F-108~~	0	0.00	
DG-100		152	EMERGENCY GENERATOR	39				
TK-108		153	FUEL OIL TANK	8,760	150,000 GAL			0.016
~~L-OIL-3~~			~~GASOLINE VEHICLE TANK~~	~~8,760~~	~~500 gallons~~			~~0.000~~
					Subtotal	0	0.0	0.016

TOTAL PLANT

	PM10	SO2	NOx	NMVOC	CO	Pb	HAPS n-hexane	HAPS HF	HAPS HCl	NH3	Hg	PM2.5
	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
process sources	55.2	0	0	0.0	0	0	0					9.4
~~solvent extraction~~												
~~CFB~~												
B&W Type FM boiler	22.95	65.75	126.23	6.14	93.77	0	17.6			6.70	0.00095	2.12
fuel handling				0.016								
TOTAL PLANT	78.2	65.8	126.2	6.2	93.8	0.0	17.6	0.0	0.0	6.7	0.00095	11.51

TOTAL PLANT	293.9
GRAND TOTAL	294

FEE	$18.00	PER TON
ANNUAL FEE	$5,292.00	

BUNGE

Enhancing the Value of America's Harvest[SM]

June 14, 2010

LeeAnne Kinsella
Permit Section, CAAPP Group
Illinois Environmental Protection Agency
Division of Air Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62702

Bunge North America, Inc.
321 E. North Street, Danville
ID No. 183020ABT
CAAPP Permit
Minor Title V Permit Modification Application

Dear Ms. Kinsella:

Please find enclosed two copies of an application package for a minor modification to the CAAPP permit for our Bunge – Danville, Illinois facility. The facility currently has an operating permit Application No. 96020027.

The enclosed application is submitted for the following reasons:
1. Eliminate certain sources from the permit,
2. Eliminate permit conditions applicable to the eliminated sources,
3. Change the names of several sources which change does not increase potential or actual emissions, and
4. Reduce the permitted emissions resulting from 1 above.

If you have any questions about this permit application package, please do not hesitate to contact Bob Henricks at (314) 292-2342, email robert.henricks@bunge.com.

Sincerely,
Bunge North America, Inc.

Dean Hughes
Eastern Regional Manager - Milling

Enclosure: Application original and 1 copy

p.c.: Aric Silver, corp. file

Description of Application

The Bunge North America, Inc. - Danville facility has permanently shut down the operation of the entirety of the PEUG3 CORN OIL EXTRACTION and PEUG5 SOYBEAN OIL EXTRACTION units. The CFB Fluidized Bed Boiler and support systems has also been permanently shut down. Until approval by IEPA for the construction and subsequent operation the B&W (96.55 MBH) and Clayton (27.98583 MBH) replacement steam generators addressed in a separate application, the B&W Type FM package boiler will be operated to provide necessary steam for the process and comfort heat needs. Due to the permanent shut down of the soybean preparation system, several of the associated sources will be used for (corn) hominy and have been so-renamed.

The primary fuel for the B&W type FM boiler will continue to be natural gas, with fuel oil as a backup.

A spreadsheet is enclosed documenting potential emissions of the subject changes to the plant.

The current permit has been marked to indicate the changes necessary to affect this minor perm it modification. To simplify these changes, where an entire condition or section must be eliminated, instead of renumbering subsequent conditions, the condition/section deleted has been replaced with the word "Deleted." The term "Reserved" could also have been used. Versus submitting this 401 page document by hard copy it is being submitted to the permit reviewer electronically be email. If submittal on a computer disk is required, please contact the applicant.

A subsequent request for minor modification will be submitted in approximately 6 months when the replacement package boilers for the B&W Type FM boiler are operational. Soon thereafter, a request to replace the Title V permit with a FESOP will be submitted.

Table of Contents

The following completed forms and supplemental information is submitted:

ITEM	NAME	PAGE(S)
271CAAPP	Application for Modification to a CAAPP Permit	1ER – 2ER
273CAAPP	Request for Administrative Permit Amendment	3ER – 4ER
292CAAPP	Fee Determination for CAAPP Source	5ER – 6ER
505CAAPP	Supplement to CAAPP Application	7ER – 8ER
	Emission Calculation Sheets	9ER – 22ER
	Mark-up of current permit submitted electronically	401 pages

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

APPLICATION FOR MODIFICATION TO A CAAPP PERMIT *(CHECK ONLY ONE)*	***FOR AGENCY USE ONLY***
☐ SIGNIFICANT MODIFICATION	ID NO.:
X MINOR MODIFICATION	PERMIT NO.:
	DATE:

SECTION ONE	***SOURCE INFORMATION***
1) SOURCE NAME: Bunge North America, Inc.	
2) SOURCE ID NO.: 183020ABT	3) DATE FORM PREPARED: 6/8/2010

SECTION TWO	***INSTRUCTIONS IN BRIEF***
1)	COMPLETE THE FOLLOWING FORM WHEN APPLYING FOR A SIGNIFICANT OR MINOR MODIFICATION.
2)	PROVIDE COMPLETED FORMS FOR THE AGENCY TO USE TO NOTIFY USEPA AND AFFECTED STATES AS REQUIRED UNDER SUBSECTIONS 8 AND 9 OF 39.5 OF THE ENVIRONMENTAL PROTECTION ACT. (COMPLETION OF THIS FORM FULFILLS THIS REQUIREMENT.)
3)	FOR A CHANGE TO A COMBINED TITLE I/CAAPP PERMIT USING THE TITLE I/TITLE V PERMIT PROCESS, A SIGNIFICANT OR MINOR MODIFICATION REQUEST THAT WILL REVISE EXISTING APPLICABLE PERMIT CONDITIONS, A *T1R REQUEST*, OR ESTABLISH NEW CONDITIONS, A *T1N REQUEST*, WILL ADDITIONALLY NEED TO INCLUDE WITH THIS REQUEST A COMPLETED "REQUEST FOR A TITLE 1 INCORPORATION INTO THE CAAPP: T1, T1 REVISED (T1R), AND/OR T1 NEW (T1N)" FORM 283-CAAPP.
4)	A SIGNIFICANT MODIFICATION REQUEST WILL REQUIRE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64 FOR EMISSION UNITS WITH POST-CONTROL EMISSIONS GREATER THAN OR EQUAL TO THE MAJOR SOURCE THRESHOLD.
5)	THE APPLICATION SHOULD INCLUDE A DESCRIPTION OF THE PROPOSED CHANGE(S), ANY PHYSICAL CHANGES IN EQUIPMENT, CHANGES IN THE METHOD OF OPERATION, CHANGES IN EMISSIONS, AND ANY NEW APPLICABLE REQUIREMENTS WHICH WILL APPLY AS A RESULT OF THE PROPOSED CHANGE.
6)	TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE THIS FORM FOR A SIGNIFICANT MODIFICATION. TO DECREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE A 273-CAAPP "REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT".
7)	REFER TO 271-CAAPP INSTRUCTIONS FOR FURTHER GUIDANCE ON COMPLETING THIS FORM.

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____
AUTHORIZED SIGNATURE

Eastern Regional Manager - Milling
TITLE OF SIGNATORY

Dean Hughes
TYPED OR PRINTED NAME OF SIGNATORY

06 / 14 / 2010
DATE

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

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_____

APPLICATION PAGE 1ER

SECTION THREE	MODIFICATION INFORMATION		
	PERMIT MODIFICATION RATIONALE		
	WHY IS THE APPLICANT APPLYING FOR A MODIFICATION? (CHECK ALL THAT APPLY)	YES	NO
1)	THE APPLICANT REQUESTS TO CHANGE A CURRENT TITLE 1 LIMIT OR OTHER LIMIT.	☐	☐
2)	THE APPLICANT REQUESTS TO INCORPORATE A NEW OR MODIFIED RULE.	☐	☐
3)	THE APPLICANT REQUESTS TO INCORPORATE A CONSTRUCTION PERMIT.	☐	☐
4)	THE APPLICANT REQUESTS TO CHANGE PERMIT REQUIRMENTS (E.G., MONITORING, RECORDKEEPING, REPORTING, ETC.).	☐	☐
5)	THE APPLICANT REQUESTS TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES.	☐	☐
6)	THE APPLICANT REQUESTS TO MODIFY A COMPLIANCE PROCEDURE.	☐	☐
7)	OTHER (DESCRIBE): Change of source names, delete sources and decrease permitted emission levels	X	☐
	FOR MINOR PERMIT MODIFICATION		
	IF REQUESTING A MINOR PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
8)	WOULD THE REQUEST VIOLATE ANY APPLICABLE REQUIREMENT?	☐	X
9)	WOULD THE REQUEST INVOLVE SIGNIFICANT CHANGES TO EXISTING MONITORING, REPORTING, OR RECORDKEEPING REQUIREMENTS IN THE PERMIT?	☐	X
10)	WOULD THE REQUEST REQUIRE A CASE-BY-CASE DETERMINATION OF AN EMISSION LIMITATION OR OTHER STANDARD, OR A SOURCE-SPECIFIC DETERMINATION OF AMBIENT IMPACTS, OR A VISIBILITY OR INCREMENT ANALYSIS?	☐	X
11)	WOULD THE REQUEST SEEK TO ESTABLISH OR CHANGE A PERMIT TERM OR CONDITION FOR WHICH THERE IS NO CORRESPONDING UNDERLYING REQUIREMENT AND WHICH AVOIDS AN APPLICABLE REQUIREMENT TO WHICH THE SOURCE WOULD OTHERWISE BE SUBJECT?	☐	X
12)	WOULD THE REQUEST BE A MODIFICATION UNDER ANY PROVISION OF TITLE I OF THE CLEAN AIR ACT?	☐	X
13)	WOULD THE REQUEST BE REQUIRED TO BE PROCESSED AS A SIGNIFICANT MODIFICATION? NOTE: PURSUANT TO 39.5(14) PERMIT MODIFICATIONS, IF THE APPLICANT ANSWERED "YES" TO ANY OF THE ABOVE QUESTIONS 8-13, THE MODIFICATION IS NOT CONSIDERED A MINOR PERMIT MODIFICATION AND WILL NEED TO BE SUBMITTED AS A SIGNIFICFANT MODIFICATION, PROCEED TO QUESTIONS 18-22.	☐	X
	DOES THE MINOR PERMIT MODIFICATION APPLICATION INCLUDE THE FOLLOWING:		
14)	A DESCRIPTION OF THE CHANGE, THE EMISSIONS RESULTING FROM THE CHANGE, AND ANY NEW APPLICABLE REQUIREMENTS THAT WILL APPLY IF THE CHANGE OCCURS?	X	☐
15)	THE SOURCE'S SUGGESTED DRAFT PERMIT (E.G., REDLINE, TRACKED CHANGES VERSION)?	X	☐
16)	A CERTIFICATION BY A RESPONSIBLE OFFICIAL THAT THE PROPOSED MODIFICATION MEETS THE CRITERIA FOR USE OF MINOR PERMIT MODIFICATION PROCEDURES (E.G., THE SIGNATURE AT THE TOP OF THIS FORM)?	X	☐
17)	UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION REQUEST, WILL THE SOURCE COMPLY WITH BOTH THE APPLICABLE REQUIREMENTS GOVERNING THE CHANGE AND THE PROPOSED PERMIT TERMS AND CONDITIONS? NOTE: UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION, THE SOURCE NEED NOT COMPLY WITH THE EXISTING PERMIT TERMS AND CONDITIONS IT SEEKS TO MODIFY.	X	☐
	FOR SIGNIFICANT PERMIT MODIFICATION		
	IF REQUESTING A SIGNIFICANT PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
18)	THE PERMIT MODIFICATION WOULD NOT QUALIFY AS EITHER MINOR PERMIT MODIFICATION OR AS ADMINISTRATIVE PERMIT AMENDMENTS?	☐	☐
19)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WILL REQUIRE A SIGNIFICANT CHANGE IN EXISTING MONITORING TERMS OR CONDITIONS?	☐	☐
20)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION FOR A RELAXATION OF REPORTING OR RECORDKEEPING REQUIREMENTS?	☐	☐
21)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WOULD REQUIRE DECISIONS TO BE MADE ON TECHNICALLY COMPLEX ISSUES?	☐	☐
22)	IF A MODIFICATION CHANGES OR EFFECTS PREVIOUSLY SUBMITTED INFORMATION (E.G., ALTERING ESTABLISHED MONITORING), DOES THIS APPLICATION INCLUDE A REVISED 200-CAAPP AND OTHER ASSOCIATED DATA OR FORMS NEEDED TO DOCUMENT THE REQUEST?	☐	☐

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

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REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT	***FOR AGENCY USE ONLY***
	ID NUMBER:
	PERMIT #:
	DATE:

GENERAL INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2a) ID NUMBER (IF KNOWN): 183020ABT	b) CAAPP PERMIT NUMBER: 96020027
3) ENVIRONMENTAL CONTACT PERSON: Aric Silver	4) CONTACT PERSON'S TELEPHONE NUMBER: 217-443-9784

AMENDMENT DATA

5) AN ADMINISTRATIVE PERMIT AMENDMENT SHALL ONLY BE USED FOR ONE OR MORE OF THE FOLLOWING REVISIONS TO A CAAPP PERMIT (PLEASE INDICATE THE TYPE OF AMENDMENT(S)):

☐ A) CORRECTS TYPOGRAPHICAL ERRORS;

☐ B) IDENTIFIES A CHANGE IN THE NAME, ADDRESS, OR PHONE NUMBER OF ANY PERSON IDENTIFIED IN THE PERMIT, OR PROVIDES A SIMILAR MINOR ADMINISTRATIVE CHANGE AT THE SOURCE;

☐ C) REQUIRES MORE FREQUENT MONITORING OR REPORTING BY THE PERMITTEE; OR

☐ D) ALLOWS FOR A CHANGE IN OWNERSHIP OR OPERATIONAL CONTROL OF THE SOURCE WHERE NO OTHER CHANGE IN THE PERMIT IS NECESSARY, PROVIDED THAT A WRITTEN AGREEMENT CONTAINING A SPECIFIC DATE FOR TRANSFER OF PERMIT RESPONSIBILITY, COVERAGE, AND LIABILITY BETWEEN THE CURRENT AND NEW PERMITTEES HAS BEEN SUBMITTED TO THE ILLINOIS EPA.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

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_____

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AMENDMENT DATA (CON'T)

6) DESCRIPTION OF REQUESTED ADMINISTRATIVE PERMIT AMENDMENT:

	CURRENT PERMIT INFORMATION	AMENDED PERMIT INFORMATION
1)	Specific source names	Revised source names
	PEUG3	Delete from the permit
2)	PEUG4	Revise unit name
	PEUG5	Delete from the permit
3)	PEUG6	Revise unit name
	Boiler House/Grounds	Delete CFB Boiler and support systems (coal, limestone & ash) from the permit
4)		
5)		
6)		
7)		
8)		

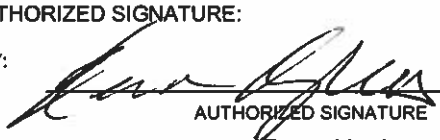
7) DOES THE APPLICATION INCLUDE A COPY OF THOSE PARTICULAR PAGES OF THE CAAPP PERMIT WHICH ARE CLEARLY MARKED TO SHOW THE REQUESTED AMENDMENT? YES ☐ YES ☐ NO

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

8) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: 

AUTHORIZED SIGNATURE

Dean Hughes

TYPED OR PRINTED NAME OF SIGNATORY

Eastern Regional Manager - Milling

TITLE OF SIGNATORY

06 / 14 / 2010

DATE

SECTION FOUR **FEE DATA**

1) WILL THE SOURCE PAY THE CURRENT MAXIMUM FEE OF $250,000.00 PER YEAR? ☐ YES

IF YES, THE REMAINDER OF THIS FORM DOES NOT NEED TO BE COMPLETED. X NO

2) EMISSION UNIT [A]	NITROGEN OXIDES (NO_X) (TONS/YR)	PARTICULATE MATTER (PART) (TONS/YR)	SULFUR DIOXIDE (SO_2) (TONS/YR)	VOLATILE ORGANIC MATERIAL (VOM) (TONS/YR)	OTHER [B] SPECIFY n-Hexane (TONS/YR)
PEUG1		19.4			
PEUG2		26.0			
PEUG4		0.5			
PEUG6		9.4			
Boiler & Grounds	126.23	22.95	65.75	6.2	17.6
				Note: n-hexane is not included in the VOC emissions	
3) SUBTOTAL	126.23	78.2	65.8	6.2	17.6
4) FUGITIVE	Included in the above				
5) TOTAL	126.23	78.2	65.8	6.2	17.6

6) GRAND TOTAL ACROSS POLLUTANTS (TONS/YR):	294
7) CALCULATED PERMIT FEE: IF GRAND TOTAL IN ITEM 6 ABOVE IS > 100 TONS/YR THEN MULTIPLY GRAND TOTAL BY $18.00 AND ENTER, OTHERWISE ENTER $1,800.00:	$5,292
8) MINIMUM PERMIT FEE IS $1,800.00 PER YEAR. MAXIMUM PERMIT FEE IS $250,000.00 PER YEAR. IF THE CALCULATED PERMIT FEE IN ITEM 7 ABOVE IS BETWEEN THESE TWO FEE AMOUNTS THEN ENTER HERE, OTHERWISE ENTER THE MINIMUM OR MAXIMUM PERMIT FEE, WHICHEVER IS APPLICABLE. THIS IS THE ACTUAL ANNUAL PERMIT FEE:	$5,292

A EMISSION UNIT - PROVIDE THE NAME AND FLOW DIAGRAM DESIGNATION OF THE EMISSION UNIT AS IT APPEARS ON THE DATA AND INFORMATION FORM.

B OTHER - ANY HAZARDOUS AIR POLLUTANT (HAP) NOT INCLUDED ELSEWHERE, E.G., CHLORINE, HCl, ETC.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

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FEE DETERMINATION FOR CAAPP SOURCE

FOR AGENCY USE ONLY
ID NO.:
PERMIT NO.:
DATE:

SECTION ONE — SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.
2) SOURCE ID NO.: 183020ABT
3) DATE FORM PREPARED: 6/8/2010

SECTION TWO — INSTRUCTIONS IN BRIEF

1) COMPLETE THIS FORM TO DETERMINE THE PERMIT FEE ESTABLISHED BY THE CAAPP PERMIT.
2) THE EMISSION LEVELS STATED IN SECTION FOUR, WHICH ARE ONLY USED FOR THE PURPOSE OF PERMIT FEE DETERMINATION, WILL BECOME PERMIT SPECIAL CONDITIONS IN THE CAAPP PERMIT.
3) THE ILLINOIS EPA DOES NOT REQUIRE PAYMENT WITH THIS APPLICATION. WHEN YOU ARE BILLED MAKE CHECK OR MONEY ORDER PAYABLE TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. SEND TO THE ADDRESS AT THE TOP OF THIS FORM. **DO NOT SEND CASH**. ON THE CHECK MEMO LINE, PLEASE LIST "CAAPP OPERATING PERMIT FEE: ID NO. XXXXXXXX", REPLACE THE Xs WITH YOUR SOURCE ID NUMBER.

SECTION THREE — FEE RATIONALE

WHAT IS THE PERMIT STATUS AT THE TIME OF THIS REQUEST? CHECK ONLY ONE BELOW.

1) ☐ INITIAL CAAPP PERMIT ☒ RENEWAL CAAPP PERMIT ☐ FESOP INITIAL/RENEWAL
☐ SIGNIFICANT MODIFICATION ☐ MINOR MODIFICATION ☐ ADMINISTRATIVE AMENDMENT

2) COMPLETE THE BELOW TABLE FOR A NON-INITIAL CAAPP PERMIT. IF THERE IS AN INCREASE/DECREASE IN EMISSIONS, ENTER THE NUMBER(S) FOR THE EMISSIONS CHANGE RATIONALE AS APPROPRIATE.

POLLUTANT	INCREASE	DECREASE	NO CHANGE	EMISSIONS CHANGE RATIONALE(S)
NITROGEN OXIDES (NO_X)	☐	X	☐	
PARTICULATE MATTER (PART)	☐	X	☐	
SULFUR DIOXIDE (SO_2)	☐	X	☐	
VOLATILE ORGANIC MATERIAL (VOM)	☐	X	☐	
OTHER (SPECIFY) n-Hexane	☐	X	☐	
OTHER (SPECIFY)	☐	☐	☐	

Removal of processes at the source and reduction of permitted emission limits.

CHANGE RATIONALE:
1 BUSINESS DECISION (E.G., OPERATING NEEDS, BANKRUPTCY, ETC.).
2 REMOVAL OR ADDITION OF PROCESSES AT THE SOURCE.
3 INCLUSION OR REMOVAL OF A CONTROL DEVICE.
4 CHEMICAL REFORMULATION (E.G., REFORMULATING A COATING FROM HIGH VOM TO A LOW VOM).
5 FUEL SWITCHING (E.G., COAL TO NATURAL GAS, ETC.).
6 METHODOLOGY CHANGE (E.G., SWITCHING A PETROLEUM SOLVENT TO AQUEOUS SOLUTION).
7 CHANGES IN METHOD USED FOR CALCULATIONS (E.G., EMISSION FACTOR CHANGE).
8 OTHER (DESCRIBE): _____
9 OTHER (DESCRIBE): _____

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

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FOR APPLICANT'S USE
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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

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SUPPLEMENT TO CAAPP APPLICATION

FOR AGENCY USE ONLY
ID NUMBER:
PERMIT #:
DATE:

THIS FORM SHALL ACCOMPANY ANY SUPPLEMENT TO A CAAPP APPLICATION, THAT IS, ANY SUBMITTAL OF NEW OR CORRECTED INFORMATION FOR A PENDING CAAPP APPLICATION.

SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2) DATE FORM PREPARED: May 20, 2010

3) SOURCE ID NO. (IF KNOWN): 183020ABT

SUPPLEMENT INFORMATION

4) DOES THIS SUPPLEMENT PROVIDE ADDITIONAL INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF NEW PAGES IN THIS SUPPLEMENT: _____

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	NEW PAGE #(S)
Elimination of solvent extraction and coal-fired boiler system		
and support facilities (coal. limestone & ash material handling)		
271CAAPP		1ER - 2ER
273CAAPP		3ER & 4ER
292CAAPP		5ER & 6ER
505CAAPP		7ER & 8ER
EMISSIONS SPREADSHEET		9ER - 22ER
Marke-up of curent permit - submitted electronically		

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

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APPLICATION PAGE 7ER

5) DOES THIS SUPPLEMENT CORRECT PREVIOUSLY SUBMITTED INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF REVISED PAGES IN THE SUPPLEMENT: _____

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	OLD PAGE #(S)	NEW PAGE #(S)
SEE CROSSED OUT UNIT SOURCE NAMES			
ON TITLE V MOD 2010 MAX PERMITTED			
EMISSIONS SPREADSHEET.			
ALSO, NEW OR CHANGED UNIT SOURCE			
NAMES ARE UNDERLINED.			
CROSSED OUT UNIT SOURCE NAMES			
ARE REQUESTED TO BE REMOVED FROM			
THE PERMIT. (EXAMPLE: "CFB FLUIDIZED			
BED BOILER" IS TO BE REMOVED FROM			
THE PERMIT.)			

SIGNATURE BLOCK

6) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION, AS AMENDED BY THIS SUPPLEMENT, ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____ Eastern Regional Manager - Milling

AUTHORIZED SIGNATURE — TITLE OF SIGNATORY

Dean Hughes — 06 / 14 / 2010

TYPED OR PRINTED NAME OF SIGNATORY — DATE

APPLICATION PAGE 8ER

BUNGE MILLING, INC.
Facility ID 183020ABT

8-Jun-10

EMISSIONS INVENTORY REPORT WORKSHEET

YEAR- MAX

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
PEUG1 Corn & Soybean Receiving, Cleaning and Storage								
			Base emissions on 1999 PM test on 5012-0005-0021 filter exhaust.	0.0017	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0069 filter exhaust.	0.00085	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.	0.00060	gr/acf			
Pre NSPS								
5012-0001-0016	301-02	1	TRUCK DUMP #1	8760	APM 40072.10	18,500	1.2	
5012-0010-0054	301-05	9	HOFFMAN BLDG 301 VAC	8760	HOFFMAN 48X96	1,000	0.1	
5012-0005-0029	301-01	10	WEST HDHS TRANS GEN ASP	8760	DD 484RF12	55,000	3.4	
5012-0003-0013	311-03	11	RHOMBO TRUCK DUMP #3	8760	APM SJL156-6	14,500	0.9	
5012-0004-0016	304-02	132	RAIL DUMP	8760	APM 41120.12	27,000	1.7	
5012-0009-0009	311-01	230	RHOMBO WEST GEN ASP	8760	APM SJL72-6	6,800	0.4	
5012-0003-0018	311-02	231	RHOMBO GALLERY GEN ASP	8760	APM SJL72-6	9,200	0.6	
5012-0010-0047			TRACK 6 VACUUM	8760	HOFFMAN	700	0.04	
4870-0013-0015	110-08	23	CLEANINGS DISCHARGE	8760	BUHLER 16S-6-30	1,900	0.04	
4750-0029-0015	201-08	99	CONVEYING GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.24	
5012-0000-0000			GRAIN RECEIVING FUGITIVES	8760	-	-	5.4	
NSPS								
5012-0005-0021	301-04	8	TRUCK DUMP #4 & W GAL GEN ASP	8760	DD 484RF12	36,017	2.3	
4870-0013-0001	110-09	24	CLEANING NORTH APM	8760	APM 41216.12	41,000	1.3	
4880-0034-0069	115-02		CORN CLEANING	8760	TD 484RF12	57,372	1.8	
5012-0002-0012	310-01	6	NORTH ST GRAIN/MEAL TRUCK DUMP #2	8760	DD 484RF12	20,000	1.3	
					Subtotal	276,589	19.4	
PEUG2 Dry Corn Milling, Processing and Products Handling								
			Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.	0.00060	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0077 filter exhaust.	0.00060	gr/acf			
4870-0010-0055	110-04	19	BEMIS BAGGING	8760	APM 16019.8	1,660	0.04	
4870-0010-0030	110-05	20	BAGGING GEN ASP	8760	APM 40020.8	3,400	0.08	
4870-0013-0019	110-07	22	BAGGING PACKER GEN ASP	8760	APM 14042.8	4,400	0.1	
4880-0042-0057	109-04	213	BRAN DRYER PROCESS	8760	APM 14036.8	2,200	0.05	
4880-0042-0062	109-03	214	BRAN SIFTER PROCESS	8760	APM 10144.8	6,215	0.1	
4880-0034-0054	109-02	215	EAST MEAL DRY/COOL	8760	APM 40120.10	13,000	0.3	
4880-0034-0059	109-01	216	WEST MEAL DRY	8760	APM 40144.8	13,295	0.3	
4880-0034-0035	105-06	217	S APM BINNING	8760	APM 41144.12	30,000	0.7	
4880-0034-0027	105-05	218	8TH FR DRACCO SCREENING	8760	DRACO 6MB-60	42,000	0.9	
4880-0034-0001	105-04	219	9TH FR DRACCO SCREENING	8760	DRACO 8MB-72	69,500	1.6	
4880-0032-0052	105-03	220	BLDG 105 VACUUM	8760	HOFFMAN	1,500	0.03	
4870-0021-0001	104-02	221	BULK LOADING WHITE GOODS	8760	DD 484RF12	36,000	0.8	
4870-0015-0016	104-01	222	BLDG 104 VACUUM	8760	HOFFMAN 38405A	1,500	0.03	
4880-0042-0054	103-06	223	BRAN BIN	8760	BUHLER 16S-6-30	980	0.02	
4880-0008-0028	103-05	224	6TH FLR SCREENING	8760	WIEDENMANN 2X4 LF150-1200	10,000	0.2	
4880-0008-0040	103-04	225	W 4TH FLR GRAVITY TABLES	8760	WIEDENMANN 2X5 LF225-2250	10,000	0.2	
4880-0034-0010	101-05	226	S LUNCHROOM SCREENING	8760	CD 484RF12	42,000	0.9	
4880-0034-0042	101-04	227	S CD SCREENING	8760	CD 484RF12	37,500	0.8	
4880-0034-0048	101-02	228	N CD GEN ASPIRATION	8760	CD 484RF12	30,000	0.7	
4880-0034-0019	101-01	229	N LUNCHROOM SCREENING	8760	CD 484RF12	36,000	0.8	
4870-0013-0024	115-01		PACKAGE & BULK LOADING	8760	TD 484RF12	42,000	0.9	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4880-0034-0077	115-03		CAMAS/BRAN	8760	TD 484RF12	45,021	1.0	
4880-0034-0071	115-04		THRU & TAIL STOCK DRYERS	8760	TD 484RF12	56,000	1.25	
4880-0032-0070	115-05		BLDG 115 VACUUM	8760	HOFFMAN	825	0.02	
4870-0005-0003			TRACK 2 UNLOAD SEC REC	8760	USS INC.	440	0.014	
4880-0009-0005			GERM GEN ASP	8760	APM 16030.4			
4932-0001-0001	348-01	87	LAB FILTER	8760	APM 14106.4	900	0.1	
4900-0003-0039	112-12A	70	AB FIN PROD SURGE NORTH	8760	MICROPUL 8B	742	0.02	
4900-0003-0045	112-12B	70	AB FIN PROD SURGE SOUTH	8760	MICROPUL 8B	742	0.02	
4990-0005-0012	112-13A	71	1/2 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0005-0042	112-13B	71	1/2 PULVOCRON VISC FLOUR REC	8760	BUHLER 9-6-100	380	0.01	
4990-0002-0010	112-13C	71	3/4 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0004-0013	112-14A	72	9/10 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0003-0010	112-14B	72	7/8 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0002-0019	112-15A	73	#3 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0002-0022	112-15B	73	#4 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0001-0039	112-15B	73	#5 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0021	112-15C	73	#1 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0024	112-15D	73	#2 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0003-0019	112-18A	75	#7 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0003-0022	112-18B	75	#8 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0022	112-18C	75	#9 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0025	112-18D	75	#10 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0002-0008	112-19A	76	3/4 PULVN GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0005-0010	112-19B	76	1/2 PULV GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0004-0011	112-20A	77	9/10 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0003-0008	112-20B	77	7/8 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0005-0028	112-21A	78	1/2 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0002-0026	112-21B	78	3/4 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0003-0026	112-22A	79	7/8 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0004-0029	112-22B	79	9/10 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0006-0024	112-27	83	HIBOND VISC FLAKE ROLLER MILL	8760	APM 15066.8	7,200	0.16	
4820-0001-0029	103-01		CSM BLENDED FOOD REC	8760	APM 40070.7	4,077	0.09	
4820-0001-0052	103-02		BLENDED FOOD PACK	8760	APM 16150.6	10,000	0.22	
4900-0001-0068	111-01		ALLBOND VISC FLOUR GEN ASP	8760	BUHLER 16-8-100	867	0.02	
4820-0003-0007	111-03		MILK BINS	8760	MICROPUL 6B	400	0.01	
4990-0007-0049	111-04		300 SERIES BINNING	8760	MICROPUL 1F1	4,452	0.10	
4990-0001-0002	111-07		SOY MEAL GEN ASP	8760	APM 16022.4	1,435	0.03	
4990-0001-0006	111-08		SOY MEAL SURGE	8760	MICROPUL 6B	500	0.01	
4990-0001-0025	111-10		MEAL BIN COOLER	8760	APM 400072.10	9,158	0.20	
4990-0002-0043	111-12		3/4 SOY FLOUR REC	8760	APM16014.8	700	0.02	
4820-0003-0072	111-13		TRI CAL BINS	8760	APM 16009.8	780	0.02	
4900-0001-0058	111-14A		5/6 ALLOND REC	8760	APM 16014.8	1,100	0.02	
4990-0003-0032	111-14B		7/8 SOY FLOUR REC	8760	APM 16014.8	1,100	0.02	
4990-0002-0033	111-15A		BIN 308	8760	MICROPUL 6B	500	0.01	
4820-0002-0072	111-15B		BIN 509	8760	MICROPUL 6B	500	0.01	
4820-0002-0068	111-15C		BIN 508	8760	MICROPUL 6B	500	0.01	
4820-0003-0038	111-15D		BIN 310	8760	MICROPUL 6B	500	0.01	
4990-0002-0036	111-15E		BIN 309	8760	MICROPUL 6B	500	0.01	
4990-0004-0037	111-17		9/10 PULVICRON REC	8760	BUHLER 16-6-220	700	0.02	
4820-0002-0038	111-18		MILK BINS	8760	MICROPUL 21-6-220	807	0.02	
4820-0002-0035	111-19		MILK BIN BAG DUMP	8760	APM 14048.6	6,000	0.13	
4990-0007-0029	111-21		BLENDING BATCH BIN GEN ASP	8760	BUHLER 25S-6-30	1,250	0.03	
4990-0007-0036	111-22		BLENDER GEN ASP	8760	BUHLER 16S-6-30	1,055	0.02	
4990-0007-0032	111-23		BLENDING GEN ASP	8760	MICROPUL 36S-8-30	1,645	0.04	
4820-0003-0063	111-24		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	3,200	0.07	
4820-0003-0059	111-25		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	2,739	0.06	
4990-0006-0040	111-27		GEN ASPIRATION	8760	BUHLER 9-8-220	742	0.02	
4900-0001-0091	111-28		#5 SL GEN ASP & #5 EXPANDER	8760	APM 14024.6	3,000	0.07	
4990-0011-0001	111-29		FIBER REC GEN ASP	8760	BUHLER 9-8-220	648	0.01	
4820-0002-0011	111-30		PCM BINNING	8760	MICROPUL 1F1	2,241	0.05	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4870-0010-0005	111-34		CF BRAN PACKING BINNING	8760	MICROPUL 25-8-220	1,232	0.03	
4900-0005-0035	111-36		BLDG 111 VACUUM	8760	HOFFMAN 60X120	1,500	0.03	
4870-0006-0006	111-37		110/210 REC GEN ASP	8760	APM 16030.4	1,400	0.03	
4990-0011-0029	111-38		FIBER REC GEN ASP	8760	APM 16019.4	1,000	0.02	
4990-0001-0029	111-41		COOLING TOWER	8760	APM 40072.10	14,000	0.31	
4820-0003-0022	111-42		INGREDIENT BIN 601	8760	MICROPUL 4B	210	0.00	
4820-0003-0026	111-43		INGREDIENT BIN 602	8760	MICROPUL 4B	210	0.00	
4820-0003-0030	111-44		INGREDIENT BIN 603	8760	MICROPUL 2 1/2 B	210	0.00	
4820-0003-0034	111-45		INGREDIENT BIN 604	8760	APM 15105.4	210	0.00	
4820-0003-0018	111-46		MICRO INGR DUMP FILTER	8760	APM 15105.4	2,500	0.06	
4820-0003-0004	111-47		MIXER GEN ASP	8760	BUHLER 25S-6-30	1,500	0.03	
4900-0001-0065	112-03		3/4 HAMMERMILL	8760	APM 16009.6	1,258	0.03	
4900-0001-0006	112-04		#3 & #4 EXPANDERS	8760	APM 16009.6	1,017	0.02	
4900-0005-0001	112-05		REPROCESS GEN CD ROOF	8760	CD 376RF10	27,550	0.62	
4900-0001-0042	112-08		#6 PULV GRINDER	8760	BUHLER 37-8-220	2,904	0.06	
4900-0001-0046	112-09		5/6 PULV AB FIN PROD SURGE BIN	8760	MICROPUL 4B	570	0.01	
4900-0002-0032	112-10		PELLET BINS	8760	BUHLER 16S-6-30	705	0.02	
4900-0003-0017	112-11A		#1 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0020	112-11B		#2 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0023	112-11C		#3 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0026	112-11D		#4 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0029	112-11E		#5 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4990-0006-0027	112-11F		VISCOSITY FLOUR REC	8760	APM 16022.8	2,143	0.05	
4990-0011-0010	112-17		COND RECEIVER/SOY MEAL GRIND	8760	APM 16014.8	1,350	0.03	
4900-0005-0007	112-24		GRIND REJECT/SCRAP BIN	8760	MICROPUL 2 1/2B	500	0.01	
4900-0005-0029	112-29		BLDG 112 VACUUM	8760	HOFFMAN	500	0.01	
4900-0001-0030	112-30		AB GRIND SURGE BIN	8760	BUHLER 37-8-220	2,100	0.05	
4900-0005-0006	112-31		N DAY GEN ASP & #5 EXPANDER	8760	CD 484RF12	36,000	0.81	
4820-0001-0093			BLENDED FOODS FILTER	8760	DD 124RF10	5,080	0.11	
4750-0029-0027	202-01	109	ROUND BIN GEN ASP	8760	APM 14072.6	7,134	0.16	
4912-0002-0054	209-01	116	HOMINY TRUCK LDOUT ASP	8760	DD 484RF12	37,000	0.83	
4860-0018-0007	208-05	119	N HOMINY FEED	8760	MICROPUL	14,000	0.31	
4860-0018-0003	208-06	123	S HOMINY FEED	8760	MICROPUL	15,000	0.34	
4860-0022-0017	208-15	133	SEC CLEAN GRINDING	8760	APM	2,000	0.04	
4860-0024-0003	208-12	177	BRAN DRYER	8760	CORONA CYCLONE	6,888	1.42	
4912-0006-0017	203-02	180	TRACK 16 BULK RAIL LDOUT	8760	WEIDENMAN LFT 2X7	30,000	0.67	
4860-0017-0073	202-07	181	FLAKING GEN ASP	8760	AERODYNE 7500 SVC	16,000	0.36	
4860-0023-0001	201-02	182	GERM DUSTERS ASP	8760	APM 40120.8	7,400	0.17	
4860-0017-0003	201-12		GERM DRYER	8760	CYCLONE	10,000	2.06	
4860-0017-0072			GERM ROLLS ASPIRATION	8760	CYCLONE	5,000	1.03	
4860-0019-0003	208-11	124	FTS DRYER ASPIRATION	8760	CORONA 15 CYCLONE	6,888	1.42	
4860-0024-0037	208-04	117	PET BRAN KICE LITES ASP	8760	MICROPUL	1,600	0.04	
4860-0017-0026			BIN 945 GERM RECEIVER	8760	BUHLER 36S-6-30	1,800	0.04	
					Subtotal	921,130	26.0	
~~PEUG3 CORN OIL EXTRACTION~~								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	**0.0055**	**gr/acf**			
~~4861-0006-0005~~	~~204-02~~	~~179~~	~~CORN EXTRACTOR, DISTILLATION, DT~~	~~8760~~	~~MIN OIL ABSORBER~~	0	MACT hex loss	0
~~4861-0003-0018~~	~~206-01~~	~~141~~	~~CORN MEAL DC PLANT #2~~	~~8760~~	~~MAC CYCLONE~~	0	0.00	
					Subtotal	0	0.00	0
PEUG4 ~~SOYBEAN PREPERATION~~ CORN MILL PRODUCT STORAGE								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	**0.0055**	**gr/acf**			
			General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.	**0.00060**	**gr/acf**			
~~4750-0038-0003~~	~~215-01~~	~~134~~	~~E-W DRYER~~	~~8760~~	~~DUCON CYCLONE~~	0	0.00	
~~4750-0036-0001~~	~~215-02~~	~~175~~	~~E-W BEAN CLEANING ASP/DEHULL~~	~~8760~~	~~484RF12~~	0	0.00	
~~4750-0029-0042~~	~~201-03~~	~~94~~	~~6TH FLOOR DEHULL~~	~~8760~~	~~MICROPUL 100S-6-20~~	0	0.00	
~~4750-0017-0043~~	~~208-17~~	~~95~~	~~BEAN CONDITIONER~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
~~4750-0018-0043~~	~~208-18~~	~~98~~	~~FLAKER ASP FLAKING SYSTEM~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
4912-0008-0006	202-03	111	BLDG 201/202 VACUUM	8760	HOFFMAN	700	0.02	
4912-0009-0005	208-09	121	BLDG 208 VACUUM	8760	HOFFMAN	700	0.02	
4750-0029-0074	201-20		~~HULLS GENERAL~~ HOMINY FEED BINS ASPIRATION	8760	DONALDSON 276RFW12	21,000	0.47	
~~4860-0019-0003~~	~~208-11~~	~~124~~	~~FTS DRYER~~	~~8760~~	~~CORONA 15 CYCLONE~~	0	0.00	
					Subtotal	22,400	0.50	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
~~PEUG5 SOYBEAN OIL EXTRACTION~~								
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
~~4750-0007-0004~~	~~204-01~~	~~136~~	~~SOLVENT EXT SOLVENT RECLAIM~~	~~8760~~	~~MIN OIL ABSORBER~~	0	Consent Decree	0
~~4750-0002-0018~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #1~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0020~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #2~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0022~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #3~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0024~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #4~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
					Subtotal	0	0.00	0
PEUG6 ~~SOYBEAN~~ CORN MILL PRODUCTS MILLING AND HANDLING								
	General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.			0.00060	gr/acf			
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
4750-0029-0032	201-01	92	~~MEAL~~ HOMINY BINNING	8760	APM 40240.8	30,000	0.67	
4750-0029-0001	201-10	101	~~MEAL~~ HOMINY GRIND GEN ASP	8760	APM 40224.4	21,000	0.47	
~~4750-0023-0017~~	~~202-02~~	~~110~~	~~KAOLIN/CALCIUM BIN REC~~	~~8760~~	~~APM 16050.8~~	2,600	0.06	
4912-0004-0022	225-01	126	TRUCK ~~MEAL~~ HOMINY LOADOUT	8760	376RF8	34,960	0.78	
4912-0003-0011	226-01	127	RAIL ~~MEAL~~ HOMINY/GRAIN LOADOUT #1	8760	376RF12	34,960	0.78	
~~4750-0029-0061~~	~~212-02~~	~~128~~	~~MEAL BINNING~~	~~8760~~	~~WEIDENMAN~~	15,640	0.35	
4750-0033-0001	234-01	130	LTMS & RAIL HOMINY/GRAIN TRANSFER	8760	376RF8	20,000	0.45	
4750-0033-0011	234-02	130	LTMS & RAIL HOMINY/GRAIN LOADOUT	8760	MAC 144MCF416	34,600	0.77	
4750-0025-0015	201-19		~~HULL~~ FLOUR PELLET COOLER	8760	MAC HE 39	8,000	2.55	
4750-0029-0045			~~MEAL~~ HOMINY SCREENER GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.17	
4750-0033-0000A			LTMS TRUCK/RAIL HOMINY/GRAIN DUMP	75,000 tons	-	-	0.01	
4750-0033-0000B			LTMS TRUCK HOMINY/GRAIN LOADOUT	75,000 tons	-	-	0 4	
4912-0000-0000			~~MEAL~~ HOMINY LOADOUT FUGITIVES	2801	-	-	1 9	
4912-0000-0001			GRAIN LOADOUT FUGITIVES	5867			0.10	
					Subtotal	209,360	9 4	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
BOILER HOUSE/GROUNDS								
			General: Base emissions on best estimate.	0.005	gr/acf			
			Coal receiving:	0.02	#/ton received			
FM-26		143	B&W TYPE FM PACKAGE BOILER	8,760	LOW NOx			
~~CFB BOILER~~		~~144~~	~~CFB FLUIDIZED BED BOILER~~	~~8,760~~	~~BAGHOUSE & NOx Red~~			
~~F-1000~~			~~COAL RECEIVING FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-109~~			~~COAL CRUSHER FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-1001~~			~~ASH LOADOUT FUGITIVES~~		~~fugitives~~		0.00	
~~CP-104~~			~~REINJECTION BIN~~	~~8,760~~	~~M2~~	0	0.00	
~~F-104~~			~~COAL BUNKER~~	~~8,760~~	~~M3~~	0	0.00	
~~F-105~~			~~LIMESTONE SILO~~	~~8,760~~	~~M4~~	0	0.00	
~~F-103~~			~~COAL SILO~~	~~8,760~~	~~M5~~	0	0.00	
~~F-101~~			~~ASH SILO PNEUMATIC RECEIVER~~	~~8,760~~	~~M6~~	0	0.00	
~~F-102~~			~~ASH SILO BINVENT & LOADOUT FILTER~~	~~8,760~~		0	0.00	
~~CP-104A~~			~~SYSTEM C STORAGE~~	~~8,760~~	~~M7~~	0	0.00	
~~F-108~~			~~COAL HANDLING~~	~~8,760~~	~~F-108~~	0	0.00	
DG-100		152	EMERGENCY GENERATOR	39				
TK-108		153	FUEL OIL TANK	8,760	150,000 GAL			0.016
~~L-OIL-3~~			~~GASOLINE VEHICLE TANK~~	~~8,760~~	~~500 gallons~~			0.000
					Subtotal	0	0.0	0.016

TOTAL PLANT

							HAPS					
	PM10	SO2	NOx	NMVOC	CO	Pb	n-hexane	HF	HCl	NH3	Hg	PM2.5
	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
process sources	55.2	0	0	0.0	0	0	0					9.4
~~solvent extraction~~												
~~CFB~~												
B&W Type FM boiler	22.95	65.75	126.23	6.14	93.77	0	17.6			6.70	0.00095	2.12
fuel handling				0.016								
TOTAL PLANT	78.2	65.8	126.2	6.2	93.8	0.0	17.6	0.0	0.0	6.7	0.00095	11.51

TOTAL PLANT	293.9
GRAND TOTAL	294

FEE	$18.00	PER TON
ANNUAL FEE	$5,292.00	

BUNGE

Enhancing the Value of America's Harvest[SM]

June 14, 2010

LeeAnne Kinsella
Permit Section, CAAPP Group
Illinois Environmental Protection Agency
Division of Air Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62702

Bunge North America, Inc.
321 E. North Street, Danville
ID No. 183020ABT
CAAPP Permit
Minor Title V Permit Modification Application

Dear Ms. Kinsella:

Please find enclosed two copies of an application package for a minor modification to the CAAPP permit for our Bunge – Danville, Illinois facility. The facility currently has an operating permit Application No. 96020027.

The enclosed application is submitted for the following reasons:
1. Eliminate certain sources from the permit,
2. Eliminate permit conditions applicable to the eliminated sources,
3. Change the names of several sources which change does not increase potential or actual emissions, and
4. Reduce the permitted emissions resulting from 1 above.

If you have any questions about this permit application package, please do not hesitate to contact Bob Henricks at (314) 292-2342, email robert.henricks@bunge.com.

Sincerely,
Bunge North America, Inc.

Dean Hughes
Eastern Regional Manager - Milling

Enclosure: Application original and 1 copy

p.c.: Aric Silver, corp. file

Description of Application

The Bunge North America, Inc. - Danville facility has permanently shut down the operation of the entirety of the PEUG3 CORN OIL EXTRACTION and PEUG5 SOYBEAN OIL EXTRACTION units. The CFB Fluidized Bed Boiler and support systems has also been permanently shut down. Until approval by IEPA for the construction and subsequent operation the B&W (96.55 MBH) and Clayton (27.98583 MBH) replacement steam generators addressed in a separate application, the B&W Type FM package boiler will be operated to provide necessary steam for the process and comfort heat needs. Due to the permanent shut down of the soybean preparation system, several of the associated sources will be used for (corn) hominy and have been so-renamed.

The primary fuel for the B&W type FM boiler will continue to be natural gas, with fuel oil as a backup.

A spreadsheet is enclosed documenting potential emissions of the subject changes to the plant.

The current permit has been marked to indicate the changes necessary to affect this minor perm it modification. To simplify these changes, where an entire condition or section must be eliminated, instead of renumbering subsequent conditions, the condition/section deleted has been replaced with the word "Deleted." The term "Reserved" could also have been used. Versus submitting this 401 page document by hard copy it is being submitted to the permit reviewer electronically be email. If submittal on a computer disk is required, please contact the applicant.

A subsequent request for minor modification will be submitted in approximately 6 months when the replacement package boilers for the B&W Type FM boiler are operational. Soon thereafter, a request to replace the Title V permit with a FESOP will be submitted.

Table of Contents

The following completed forms and supplemental information is submitted:

ITEM	NAME	PAGE(S)
271CAAPP	Application for Modification to a CAAPP Permit	1ER – 2ER
273CAAPP	Request for Administrative Permit Amendment	3ER – 4ER
292CAAPP	Fee Determination for CAAPP Source	5ER – 6ER
505CAAPP	Supplement to CAAPP Application	7ER – 8ER
	Emission Calculation Sheets	9ER – 22ER
	Mark-up of current permit submitted electronically	401 pages

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation:
_____

APPLICATION FOR MODIFICATION TO A CAAPP PERMIT (CHECK ONLY ONE)	FOR AGENCY USE ONLY
☐ SIGNIFICANT MODIFICATION	ID NO.:
X MINOR MODIFICATION	PERMIT NO.:
	DATE:

SECTION ONE	SOURCE INFORMATION
1) SOURCE NAME: Bunge North America, Inc.	
2) SOURCE ID NO.: 183020ABT	3) DATE FORM PREPARED: 6/8/2010

SECTION TWO	INSTRUCTIONS IN BRIEF
1)	COMPLETE THE FOLLOWING FORM WHEN APPLYING FOR A SIGNIFICANT OR MINOR MODIFICATION.
2)	PROVIDE COMPLETED FORMS FOR THE AGENCY TO USE TO NOTIFY USEPA AND AFFECTED STATES AS REQUIRED UNDER SUBSECTIONS 8 AND 9 OF 39.5 OF THE ENVIRONMENTAL PROTECTION ACT. (COMPLETION OF THIS FORM FULFILLS THIS REQUIREMENT.)
3)	FOR A CHANGE TO A COMBINED TITLE I/CAAPP PERMIT USING THE TITLE I/TITLE V PERMIT PROCESS, A SIGNIFICANT OR MINOR MODIFICATION REQUEST THAT WILL REVISE EXISTING APPLICABLE PERMIT CONDITIONS, A *T1R REQUEST*, OR ESTABLISH NEW CONDITIONS, A *T1N REQUEST*, WILL ADDITIONALLY NEED TO INCLUDE WITH THIS REQUEST A COMPLETED "REQUEST FOR A TITLE 1 INCORPORATION INTO THE CAAPP: T1, T1 REVISED (T1R), AND/OR T1 NEW (T1N)" FORM 283-CAAPP.
4)	A SIGNIFICANT MODIFICATION REQUEST WILL REQUIRE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64 FOR EMISSION UNITS WITH POST-CONTROL EMISSIONS GREATER THAN OR EQUAL TO THE MAJOR SOURCE THRESHOLD.
5)	THE APPLICATION SHOULD INCLUDE A DESCRIPTION OF THE PROPOSED CHANGE(S), ANY PHYSICAL CHANGES IN EQUIPMENT, CHANGES IN THE METHOD OF OPERATION, CHANGES IN EMISSIONS, AND ANY NEW APPLICABLE REQUIREMENTS WHICH WILL APPLY AS A RESULT OF THE PROPOSED CHANGE.
6)	TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE THIS FORM FOR A SIGNIFICANT MODIFICATION. TO DECREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE A 273-CAAPP "REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT".
7)	REFER TO 271-CAAPP INSTRUCTIONS FOR FURTHER GUIDANCE ON COMPLETING THIS FORM.

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____
AUTHORIZED SIGNATURE

Eastern Regional Manager - Milling
TITLE OF SIGNATORY

Dean Hughes
TYPED OR PRINTED NAME OF SIGNATORY

06 / 14 / 2010
DATE

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

APPLICATION PAGE 1ER

SECTION THREE	MODIFICATION INFORMATION		
	PERMIT MODIFICATION RATIONALE		
	WHY IS THE APPLICANT APPLYING FOR A MODIFICATION? (CHECK ALL THAT APPLY)	YES	NO
1)	THE APPLICANT REQUESTS TO CHANGE A CURRENT TITLE 1 LIMIT OR OTHER LIMIT.	☐	☐
2)	THE APPLICANT REQUESTS TO INCORPORATE A NEW OR MODIFIED RULE.	☐	☐
3)	THE APPLICANT REQUESTS TO INCORPORATE A CONSTRUCTION PERMIT.	☐	☐
4)	THE APPLICANT REQUESTS TO CHANGE PERMIT REQUIRMENTS (E.G., MONITORING, RECORDKEEPING, REPORTING, ETC.).	☐	☐
5)	THE APPLICANT REQUESTS TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES.	☐	☐
6)	THE APPLICANT REQUESTS TO MODIFY A COMPLIANCE PROCEDURE.	☐	☐
7)	OTHER (DESCRIBE): Change of source names, delete sources and decrease permitted emission levels	X	☐
	FOR MINOR PERMIT MODIFICATION		
	IF REQUESTING A MINOR PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
8)	WOULD THE REQUEST VIOLATE ANY APPLICABLE REQUIREMENT?	☐	X
9)	WOULD THE REQUEST INVOLVE SIGNIFICANT CHANGES TO EXISTING MONITORING, REPORTING, OR RECORDKEEPING REQUIREMENTS IN THE PERMIT?	☐	X
10)	WOULD THE REQUEST REQUIRE A CASE-BY-CASE DETERMINATION OF AN EMISSION LIMITATION OR OTHER STANDARD, OR A SOURCE-SPECIFIC DETERMINATION OF AMBIENT IMPACTS, OR A VISIBILITY OR INCREMENT ANALYSIS?	☐	X
11)	WOULD THE REQUEST SEEK TO ESTABLISH OR CHANGE A PERMIT TERM OR CONDITION FOR WHICH THERE IS NO CORRESPONDING UNDERLYING REQUIREMENT AND WHICH AVOIDS AN APPLICABLE REQUIREMENT TO WHICH THE SOURCE WOULD OTHERWISE BE SUBJECT?	☐	X
12)	WOULD THE REQUEST BE A MODIFICATION UNDER ANY PROVISION OF TITLE I OF THE CLEAN AIR ACT?	☐	X
13)	WOULD THE REQUEST BE REQUIRED TO BE PROCESSED AS A SIGNIFICANT MODIFICATION? NOTE: PURSUANT TO 39.5(14) PERMIT MODIFICATIONS, IF THE APPLICANT ANSWERED "YES" TO ANY OF THE ABOVE QUESTIONS 8-13, THE MODIFICATION IS NOT CONSIDERED A MINOR PERMIT MODIFICATION AND WILL NEED TO BE SUBMITTED AS A SIGNIFICFANT MODIFICATION, PROCEED TO QUESTIONS 18-22.	☐	X
	DOES THE MINOR PERMIT MODIFICATION APPLICATION INCLUDE THE FOLLOWING:		
14)	A DESCRIPTION OF THE CHANGE, THE EMISSIONS RESULTING FROM THE CHANGE, AND ANY NEW APPLICABLE REQUIREMENTS THAT WILL APPLY IF THE CHANGE OCCURS?	X	☐
15)	THE SOURCE'S SUGGESTED DRAFT PERMIT (E.G., REDLINE, TRACKED CHANGES VERSION)?	X	☐
16)	A CERTIFICATION BY A RESPONSIBLE OFFICIAL THAT THE PROPOSED MODIFICATION MEETS THE CRITERIA FOR USE OF MINOR PERMIT MODIFICATION PROCEDURES (E.G., THE SIGNATURE AT THE TOP OF THIS FORM)?	X	☐
17)	UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION REQUEST, WILL THE SOURCE COMPLY WITH BOTH THE APPLICABLE REQUIREMENTS GOVERNING THE CHANGE AND THE PROPOSED PERMIT TERMS AND CONDITIONS? NOTE: UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION, THE SOURCE NEED NOT COMPLY WITH THE EXISTING PERMIT TERMS AND CONDITIONS IT SEEKS TO MODIFY.	X	☐
	FOR SIGNIFICANT PERMIT MODIFICATION		
	IF REQUESTING A SIGNIFICANT PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
18)	THE PERMIT MODIFICATION WOULD NOT QUALIFY AS EITHER MINOR PERMIT MODIFICATION OR AS ADMINISTRATIVE PERMIT AMENDMENTS?	☐	☐
19)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WILL REQUIRE A SIGNIFICANT CHANGE IN EXISTING MONITORING TERMS OR CONDITIONS?	☐	☐
20)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION FOR A RELAXATION OF REPORTING OR RECORDKEEPING REQUIREMENTS?	☐	☐
21)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WOULD REQUIRE DECISIONS TO BE MADE ON TECHNICALLY COMPLEX ISSUES?	☐	☐
22)	IF A MODIFICATION CHANGES OR EFFECTS PREVIOUSLY SUBMITTED INFORMATION (E.G., ALTERING ESTABLISHED MONITORING), DOES THIS APPLICATION INCLUDE A REVISED 200-CAAPP AND OTHER ASSOCIATED DATA OR FORMS NEEDED TO DOCUMENT THE REQUEST?	☐	☐

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: _____ / _____ / _____
Page _____ of _____
Source Designation:
_____

REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT	FOR AGENCY USE ONLY
	ID NUMBER:
	PERMIT #:
	DATE:

GENERAL INFORMATION

1) SOURCE NAME: Bunge North America. Inc.

2a) ID NUMBER (IF KNOWN): 183020ABT	b) CAAPP PERMIT NUMBER: 96020027
3) ENVIRONMENTAL CONTACT PERSON: Aric Silver	4) CONTACT PERSON'S TELEPHONE NUMBER: 217-443-9784

AMENDMENT DATA

5) AN ADMINISTRATIVE PERMIT AMENDMENT SHALL ONLY BE USED FOR ONE OR MORE OF THE FOLLOWING REVISIONS TO A CAAPP PERMIT (PLEASE INDICATE THE TYPE OF AMENDMENT(S)):

☐ A) CORRECTS TYPOGRAPHICAL ERRORS;

☐ B) IDENTIFIES A CHANGE IN THE NAME, ADDRESS, OR PHONE NUMBER OF ANY PERSON IDENTIFIED IN THE PERMIT, OR PROVIDES A SIMILAR MINOR ADMINISTRATIVE CHANGE AT THE SOURCE;

☐ C) REQUIRES MORE FREQUENT MONITORING OR REPORTING BY THE PERMITTEE; OR

☐ D) ALLOWS FOR A CHANGE IN OWNERSHIP OR OPERATIONAL CONTROL OF THE SOURCE WHERE NO OTHER CHANGE IN THE PERMIT IS NECESSARY, PROVIDED THAT A WRITTEN AGREEMENT CONTAINING A SPECIFIC DATE FOR TRANSFER OF PERMIT RESPONSIBILITY, COVERAGE, AND LIABILITY BETWEEN THE CURRENT AND NEW PERMITTEES HAS BEEN SUBMITTED TO THE ILLINOIS EPA.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

AMENDMENT DATA (CON'T)

6) DESCRIPTION OF REQUESTED ADMINISTRATIVE PERMIT AMENDMENT:

	CURRENT PERMIT INFORMATION	AMENDED PERMIT INFORMATION
1)	Specific source names	Revised source names
	PEUG3	Delete from the permit
2)	PEUG4	Revise unit name
	PEUG5	Delete from the permit
3)	PEUG6	Revise unit name
	Boiler House/Grounds	Delete CFB Boiler and support systems (coal, limestone & ash) from the permit
4)		
5)		
6)		
7)		
8)		

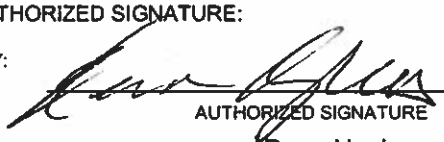
7) DOES THE APPLICATION INCLUDE A COPY OF THOSE PARTICULAR PAGES OF THE CAAPP PERMIT WHICH ARE CLEARLY MARKED TO SHOW THE REQUESTED AMENDMENT? YES ☐ YES ☐ NO

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

8) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: 

AUTHORIZED SIGNATURE

Eastern Regional Manager - Milling

TITLE OF SIGNATORY

Dean Hughes

TYPED OR PRINTED NAME OF SIGNATORY

06 / 14 / 2010

DATE

APPLICATION PAGE _4ER___

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273-CAAPP

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

FEE DETERMINATION FOR CAAPP SOURCE

FOR AGENCY USE ONLY
ID NO.:
PERMIT NO.:
DATE:

SECTION ONE — SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.
2) SOURCE ID NO.: 183020ABT
3) DATE FORM PREPARED: 6/8/2010

SECTION TWO — INSTRUCTIONS IN BRIEF

1) COMPLETE THIS FORM TO DETERMINE THE PERMIT FEE ESTABLISHED BY THE CAAPP PERMIT.
2) THE EMISSION LEVELS STATED IN SECTION FOUR, WHICH ARE ONLY USED FOR THE PURPOSE OF PERMIT FEE DETERMINATION, WILL BECOME PERMIT SPECIAL CONDITIONS IN THE CAAPP PERMIT.
3) THE ILLINOIS EPA DOES NOT REQUIRE PAYMENT WITH THIS APPLICATION. WHEN YOU ARE BILLED MAKE CHECK OR MONEY ORDER PAYABLE TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. SEND TO THE ADDRESS AT THE TOP OF THIS FORM. **DO NOT SEND CASH**. ON THE CHECK MEMO LINE, PLEASE LIST "CAAPP OPERATING PERMIT FEE: ID NO. XXXXXXXXX", REPLACE THE Xs WITH YOUR SOURCE ID NUMBER.

SECTION THREE — FEE RATIONALE

WHAT IS THE PERMIT STATUS AT THE TIME OF THIS REQUEST? CHECK ONLY ONE BELOW.

1) ☐ INITIAL CAAPP PERMIT ☒ RENEWAL CAAPP PERMIT ☐ FESOP INITIAL/RENEWAL
☐ SIGNIFICANT MODIFICATION ☐ MINOR MODIFICATION ☐ ADMINISTRATIVE AMENDMENT

2) COMPLETE THE BELOW TABLE FOR A NON-INITIAL CAAPP PERMIT. IF THERE IS AN INCREASE/DECREASE IN EMISSIONS, ENTER THE NUMBER(S) FOR THE EMISSIONS CHANGE RATIONALE AS APPROPRIATE.

POLLUTANT	INCREASE	DECREASE	NO CHANGE	EMISSIONS CHANGE RATIONALE(S)
NITROGEN OXIDES (NO_X)	☐	X	☐	
PARTICULATE MATTER (PART)	☐	X	☐	
SULFUR DIOXIDE (SO_2)	☐	X	☐	
VOLATILE ORGANIC MATERIAL (VOM)	☐	X	☐	
OTHER (SPECIFY) n-Hexane	☐	X	☐	
OTHER (SPECIFY)	☐	☐	☐	

Removal of processes at the source and reduction of permitted emission limits.

CHANGE RATIONALE:
1 BUSINESS DECISION (E.G., OPERATING NEEDS, BANKRUPTCY, ETC.).
2 REMOVAL OR ADDITION OF PROCESSES AT THE SOURCE.
3 INCLUSION OR REMOVAL OF A CONTROL DEVICE.
4 CHEMICAL REFORMULATION (E.G., REFORMULATING A COATING FROM HIGH VOM TO A LOW VOM).
5 FUEL SWITCHING (E.G., COAL TO NATURAL GAS, ETC.).
6 METHODOLOGY CHANGE (E.G., SWITCHING A PETROLEUM SOLVENT TO AQUEOUS SOLUTION).
7 CHANGES IN METHOD USED FOR CALCULATIONS (E.G., EMISSION FACTOR CHANGE).
8 OTHER (DESCRIBE): _____
9 OTHER (DESCRIBE): _____

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

APPLICATION PAGE 5ER

FOR APPLICANT'S USE

SECTION FOUR — FEE DATA

1) WILL THE SOURCE PAY THE CURRENT MAXIMUM FEE OF $250,000.00 PER YEAR? ☐ YES X NO

IF YES, THE REMAINDER OF THIS FORM DOES NOT NEED TO BE COMPLETED.

2) EMISSION UNIT [A]	NITROGEN OXIDES (NO_X) (TONS/YR)	PARTICULATE MATTER (PART) (TONS/YR)	SULFUR DIOXIDE (SO_2) (TONS/YR)	VOLATILE ORGANIC MATERIAL (VOM) (TONS/YR)	OTHER [B] SPECIFY n-Hexane (TONS/YR)
PEUG1		19.4			
PEUG2		26.0			
PEUG4		0.5			
PEUG6		9.4			
Boiler & Grounds	126.23	22.95	65.75	6.2	17.6
				Note: n-hexane is not included in the VOC emissions	
3) SUBTOTAL	126.23	78.2	65.8	6.2	17.6
4) FUGITIVE	Included in the above				
5) TOTAL	126.23	78.2	65.8	6.2	17.6

6) GRAND TOTAL ACROSS POLLUTANTS (TONS/YR):	294
7) CALCULATED PERMIT FEE: IF GRAND TOTAL IN ITEM 6 ABOVE IS > 100 TONS/YR THEN MULTIPLY GRAND TOTAL BY $18.00 AND ENTER, OTHERWISE ENTER $1,800.00:	$5,292
8) MINIMUM PERMIT FEE IS $1,800.00 PER YEAR. MAXIMUM PERMIT FEE IS $250,000.00 PER YEAR. IF THE CALCULATED PERMIT FEE IN ITEM 7 ABOVE IS BETWEEN THESE TWO FEE AMOUNTS THEN ENTER HERE, OTHERWISE ENTER THE MINIMUM OR MAXIMUM PERMIT FEE, WHICHEVER IS APPLICABLE. THIS IS THE ACTUAL ANNUAL PERMIT FEE:	$5,292

A EMISSION UNIT - PROVIDE THE NAME AND FLOW DIAGRAM DESIGNATION OF THE EMISSION UNIT AS IT APPEARS ON THE DATA AND INFORMATION FORM.
B OTHER - ANY HAZARDOUS AIR POLLUTANT (HAP) NOT INCLUDED ELSEWHERE, E.G., CHLORINE, HCl, ETC.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
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Source Designation: _____

SUPPLEMENT TO CAAPP APPLICATION

FOR AGENCY USE ONLY
ID NUMBER:
PERMIT #:
DATE:

THIS FORM SHALL ACCOMPANY ANY SUPPLEMENT TO A CAAPP APPLICATION, THAT IS, ANY SUBMITTAL OF NEW OR CORRECTED INFORMATION FOR A PENDING CAAPP APPLICATION.

SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2) DATE FORM PREPARED: May 20, 2010

3) SOURCE ID NO. (IF KNOWN): 183020ABT

SUPPLEMENT INFORMATION

4) DOES THIS SUPPLEMENT PROVIDE ADDITIONAL INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF NEW PAGES IN THIS SUPPLEMENT: _____

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	NEW PAGE #(S)
Elimination of solvent extraction and coal-fired boiler system		
and support facilities (coal. limestone & ash material handling)		
271CAAPP		1ER - 2ER
273CAAPP		3ER & 4ER
292CAAPP		5ER & 6ER
505CAAPP		7ER & 8ER
EMISSIONS SPREADSHEET		9ER - 22ER
Marke-up of curent permit - submitted electronically		

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

APPLICATION PAGE 7ER

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505-CAAPP

5) DOES THIS SUPPLEMENT CORRECT PREVIOUSLY SUBMITTED INFORMATION? ☒ YES ☐ NO

IF YES, COMPLETE THE FOLLOWING:

NUMBER OF REVISED PAGES IN THE SUPPLEMENT: _____

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	OLD PAGE #(S)	NEW PAGE #(S)
SEE CROSSED OUT UNIT SOURCE NAMES			
ON TITLE V MOD 2010 MAX PERMITTED			
EMISSIONS SPREADSHEET.			
ALSO, NEW OR CHANGED UNIT SOURCE			
NAMES ARE UNDERLINED.			
CROSSED OUT UNIT SOURCE NAMES			
ARE REQUESTED TO BE REMOVED FROM			
THE PERMIT. (EXAMPLE: "CFB FLUIDIZED			
BED BOILER" IS TO BE REMOVED FROM			
THE PERMIT.)			

SIGNATURE BLOCK

6) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION, AS AMENDED BY THIS SUPPLEMENT, ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____ (AUTHORIZED SIGNATURE)

Eastern Regional Manager - Milling (TITLE OF SIGNATORY)

Dean Hughes (TYPED OR PRINTED NAME OF SIGNATORY)

06 / 14 / 2010 (DATE)

APPLICATION PAGE 8ER

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505-CAAPP

BUNGE MILLING, INC.
Facility ID 183020ABT

8-Jun-10

EMISSIONS INVENTORY REPORT
WORKSHEET

YEAR- MAX

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
PEUG1 Corn & Soybean Receiving, Cleaning and Storage								
			Base emissions on 1999 PM test on 5012-0005-0021 filter exhaust.	0.0017	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0069 filter exhaust.	0.00085	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.	0.00060	gr/acf			
Pre NSPS								
5012-0001-0016	301-02	1	TRUCK DUMP #1	8760	APM 40072.10	18,500	1.2	
5012-0010-0054	301-05	9	HOFFMAN BLDG 301 VAC	8760	HOFFMAN 48X96	1,000	0.1	
5012-0005-0029	301-01	10	WEST HDHS TRANS GEN ASP	8760	DD 484RF12	55,000	3.4	
5012-0003-0013	311-03	11	RHOMBO TRUCK DUMP #3	8760	APM SJL156-6	14,500	0.9	
5012-0004-0016	304-02	132	RAIL DUMP	8760	APM 41120.12	27,000	1.7	
5012-0009-0009	311-01	230	RHOMBO WEST GEN ASP	8760	APM SJL72-6	6,800	0.4	
5012-0003-0018	311-02	231	RHOMBO GALLERY GEN ASP	8760	APM SJL72-6	9,200	0.6	
5012-0010-0047			TRACK 6 VACUUM	8760	HOFFMAN	700	0.04	
4870-0013-0015	110-08	23	CLEANINGS DISCHARGE	8760	BUHLER 16S-6-30	1,900	0.04	
4750-0029-0015	201-08	99	CONVEYING GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.24	
5012-0000-0000			GRAIN RECEIVING FUGITIVES	8760	-	-	5.4	
NSPS								
5012-0005-0021	301-04	8	TRUCK DUMP #4 & W GAL GEN ASP	8760	DD 484RF12	36,017	2.3	
4870-0013-0001	110-09	24	CLEANING NORTH APM	8760	APM 41216.12	41,000	1.3	
4880-0034-0069	115-02		CORN CLEANING	8760	TD 484RF12	57,372	1.8	
5012-0002-0012	310-01	6	NORTH ST GRAIN/MEAL TRUCK DUMP #2	8760	DD 484RF12	20,000	1.3	
					Subtotal	276,589	19.4	
PEUG2 Dry Corn Milling, Processing and Products Handling								
			Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.	0.00060	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0077 filter exhaust.	0.00060	gr/acf			
4870-0010-0055	110-04	19	BEMIS BAGGING	8760	APM 16019.8	1,660	0.04	
4870-0010-0030	110-05	20	BAGGING GEN ASP	8760	APM 40020.8	3,400	0.08	
4870-0013-0019	110-07	22	BAGGING PACKER GEN ASP	8760	APM 14042.8	4,400	0.1	
4880-0042-0057	109-04	213	BRAN DRYER PROCESS	8760	APM 14036.8	2,200	0.05	
4880-0042-0062	109-03	214	BRAN SIFTER PROCESS	8760	APM 10144.8	6,215	0.1	
4880-0034-0054	109-02	215	EAST MEAL DRY/COOL	8760	APM 40120.10	13,000	0.3	
4880-0034-0059	109-01	216	WEST MEAL DRY	8760	APM 40144.8	13,295	0.3	
4880-0034-0035	105-06	217	S APM BINNING	8760	APM 41144.12	30,000	0.7	
4880-0034-0027	105-05	218	8TH FR DRACCO SCREENING	8760	DRACO 6MB-60	42,000	0.9	
4880-0034-0001	105-04	219	9TH FR DRACCO SCREENING	8760	DRACO 8MB-72	69,500	1.6	
4880-0032-0052	105-03	220	BLDG 105 VACUUM	8760	HOFFMAN	1,500	0.03	
4870-0021-0001	104-02	221	BULK LOADING WHITE GOODS	8760	DD 484RF12	36,000	0.8	
4870-0015-0016	104-01	222	BLDG 104 VACUUM	8760	HOFFMAN 38405A	1,500	0.03	
4880-0042-0054	103-06	223	BRAN BIN	8760	BUHLER 16S-6-30	980	0.02	
4880-0008-0028	103-05	224	6TH FLR SCREENING	8760	WIEDENMANN 2X4 LF150-1200	10,000	0.2	
4880-0008-0040	103-04	225	W 4TH FLR GRAVITY TABLES	8760	WIEDENMANN 2X5 LF225-2250	10,000	0.2	
4880-0034-0010	101-05	226	S LUNCHROOM SCREENING	8760	CD 484RF12	42,000	0.9	
4880-0034-0042	101-04	227	S CD SCREENING	8760	CD 484RF12	37,500	0.8	
4880-0034-0048	101-02	228	N CD GEN ASPIRATION	8760	CD 484RF12	30,000	0.7	
4880-0034-0019	101-01	229	N LUNCHROOM SCREENING	8760	CD 484RF12	36,000	0.8	
4870-0013-0024	115-01		PACKAGE & BULK LOADING	8760	TD 484RF12	42,000	0.9	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4880-0034-0077	115-03		CAMAS/BRAN	8760	TD 484RF12	45,021	1.0	
4880-0034-0071	115-04		THRU & TAIL STOCK DRYERS	8760	TD 484RF12	56,000	1.25	
4880-0032-0070	115-05		BLDG 115 VACUUM	8760	HOFFMAN	825	0.02	
4870-0005-0003			TRACK 2 UNLOAD SEC REC	8760	USS INC.	440	0.014	
4880-0009-0005			GERM GEN ASP	8760	APM 16030.4			
4932-0001-0001	348-01	87	LAB FILTER	8760	APM 14106.4	900	0.1	
4900-0003-0039	112-12A	70	AB FIN PROD SURGE NORTH	8760	MICROPUL 8B	742	0.02	
4900-0003-0045	112-12B	70	AB FIN PROD SURGE SOUTH	8760	MICROPUL 8B	742	0.02	
4990-0005-0012	112-13A	71	1/2 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0005-0042	112-13B	71	1/2 PULVOCRON VISC FLOUR REC	8760	BUHLER 9-6-100	380	0.01	
4990-0002-0010	112-13C	71	3/4 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0004-0013	112-14A	72	9/10 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0003-0010	112-14B	72	7/8 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0002-0019	112-15A	73	#3 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0002-0022	112-15B	73	#4 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0001-0039	112-15B	73	#5 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0021	112-15C	73	#1 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0024	112-15D	73	#2 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0003-0019	112-18A	75	#7 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0003-0022	112-18B	75	#8 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0022	112-18C	75	#9 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0025	112-18D	75	#10 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0002-0008	112-19A	76	3/4 PULVN GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0005-0010	112-19B	76	1/2 PULV GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0004-0011	112-20A	77	9/10 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0003-0008	112-20B	77	7/8 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0005-0028	112-21A	78	1/2 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0002-0026	112-21B	78	3/4 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0003-0026	112-22A	79	7/8 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0004-0029	112-22B	79	9/10 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0006-0024	112-27	83	HIBOND VISC FLAKE ROLLER MILL	8760	APM 15066.8	7,200	0.16	
4820-0001-0029	103-01		CSM BLENDED FOOD REC	8760	APM 40070.7	4,077	0.09	
4820-0001-0052	103-02		BLENDED FOOD PACK	8760	APM 16150.6	10,000	0.22	
4900-0001-0068	111-01		ALLBOND VISC FLOUR GEN ASP	8760	BUHLER 16-8-100	867	0.02	
4820-0003-0007	111-03		MILK BINS	8760	MICROPUL 6B	400	0.01	
4990-0007-0049	111-04		300 SERIES BINNING	8760	MICROPUL 1F1	4,452	0.10	
4990-0001-0002	111-07		SOY MEAL GEN ASP	8760	APM 16022.4	1,435	0.03	
4990-0001-0006	111-08		SOY MEAL SURGE	8760	MICROPUL 6B	500	0.01	
4990-0001-0025	111-10		MEAL BIN COOLER	8760	APM 400072.10	9,158	0.20	
4990-0002-0043	111-12		3/4 SOY FLOUR REC	8760	APM16014.8	700	0.02	
4820-0003-0072	111-13		TRI CAL BINS	8760	APM 16009.8	780	0.02	
4900-0001-0058	111-14A		5/6 ALLOND REC	8760	APM 16014.8	1,100	0.02	
4990-0003-0032	111-14B		7/8 SOY FLOUR REC	8760	APM 16014.8	1,100	0.02	
4990-0002-0033	111-15A		BIN 308	8760	MICROPUL 6B	500	0.01	
4820-0002-0072	111-15B		BIN 509	8760	MICROPUL 6B	500	0.01	
4820-0002-0068	111-15C		BIN 508	8760	MICROPUL 6B	500	0.01	
4820-0003-0038	111-15D		BIN 310	8760	MICROPUL 6B	500	0.01	
4990-0002-0036	111-15E		BIN 309	8760	MICROPUL 6B	500	0.01	
4990-0004-0037	111-17		9/10 PULVICRON REC	8760	BUHLER 16-6-220	700	0.02	
4820-0002-0038	111-18		MILK BINS	8760	MICROPUL 21-6-220	807	0.02	
4820-0002-0035	111-19		MILK BIN BAG DUMP	8760	APM 14048.6	6,000	0.13	
4990-0007-0029	111-21		BLENDING BATCH BIN GEN ASP	8760	BUHLER 25S-6-30	1,250	0.03	
4990-0007-0036	111-22		BLENDER GEN ASP	8760	BUHLER 16S-6-30	1,055	0.02	
4990-0007-0032	111-23		BLENDING GEN ASP	8760	MICROPUL 36S-8-30	1,645	0.04	
4820-0003-0063	111-24		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	3,200	0.07	
4820-0003-0059	111-25		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	2,739	0.06	
4990-0006-0040	111-27		GEN ASPIRATION	8760	BUHLER 9-8-220	742	0.02	
4900-0001-0091	111-28		#5 SL GEN ASP & #5 EXPANDER	8760	APM 14024.6	3,000	0.07	
4990-0011-0001	111-29		FIBER REC GEN ASP	8760	BUHLER 9-8-220	648	0.01	
4820-0002-0011	111-30		PCM BINNING	8760	MICROPUL 1F1	2,241	0.05	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4870-0010-0005	111-34		CF BRAN PACKING BINNING	8760	MICROPUL 25-8-220	1,232	0.03	
4900-0005-0035	111-36		BLDG 111 VACUUM	8760	HOFFMAN 60X120	1,500	0.03	
4870-0006-0006	111-37		110/210 REC GEN ASP	8760	APM 16030.4	1,400	0.03	
4990-0011-0029	111-38		FIBER REC GEN ASP	8760	APM 16019.4	1,000	0.02	
4990-0001-0029	111-41		COOLING TOWER	8760	APM 40072.10	14,000	0.31	
4820-0003-0022	111-42		INGREDIENT BIN 601	8760	MICROPUL 4B	210	0.00	
4820-0003-0026	111-43		INGREDIENT BIN 602	8760	MICROPUL 4B	210	0.00	
4820-0003-0030	111-44		INGREDIENT BIN 603	8760	MICROPUL 2 1/2 B	210	0.00	
4820-0003-0034	111-45		INGREDIENT BIN 604	8760	APM 15105.4	210	0.00	
4820-0003-0018	111-46		MICRO INGR DUMP FILTER	8760	APM 15105.4	2,500	0.06	
4820-0003-0004	111-47		MIXER GEN ASP	8760	BUHLER 25S-6-30	1,500	0.03	
4900-0001-0065	112-03		3/4 HAMMERMILL	8760	APM 16009.6	1,258	0.03	
4900-0001-0006	112-04		#3 & #4 EXPANDERS	8760	APM 16009.6	1,017	0.02	
4900-0005-0001	112-05		REPROCESS GEN CD ROOF	8760	CD 376RF10	27,550	0.62	
4900-0001-0042	112-08		#6 PULV GRINDER	8760	BUHLER 37-8-220	2,904	0.06	
4900-0001-0046	112-09		5/6 PULV AB FIN PROD SURGE BIN	8760	MICROPUL 4B	570	0.01	
4900-0002-0032	112-10		PELLET BINS	8760	BUHLER 16S-6-30	705	0.02	
4900-0003-0017	112-11A		#1 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0020	112-11B		#2 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0023	112-11C		#3 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0026	112-11D		#4 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0029	112-11E		#5 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4990-0006-0027	112-11F		VISCOSITY FLOUR REC	8760	APM 16022.8	2,143	0.05	
4990-0011-0010	112-17		COND RECEIVER/SOY MEAL GRIND	8760	APM 16014.8	1,350	0.03	
4900-0005-0007	112-24		GRIND REJECT/SCRAP BIN	8760	MICROPUL 2 1/2B	500	0.01	
4900-0005-0029	112-29		BLDG 112 VACUUM	8760	HOFFMAN	500	0.01	
4900-0001-0030	112-30		AB GRIND SURGE BIN	8760	BUHLER 37-8-220	2,100	0.05	
4900-0005-0006	112-31		N DAY GEN ASP & #5 EXPANDER	8760	CD 484RF12	36,000	0.81	
4820-0001-0093			BLENDED FOODS FILTER	8760	DD 124RF10	5,080	0.11	
4750-0029-0027	202-01	109	ROUND BIN GEN ASP	8760	APM 14072.6	7,134	0.16	
4912-0002-0054	209-01	116	HOMINY TRUCK LDOUT ASP	8760	DD 484RF12	37,000	0.83	
4860-0018-0007	208-05	119	N HOMINY FEED	8760	MICROPUL	14,000	0.31	
4860-0018-0003	208-06	123	S HOMINY FEED	8760	MICROPUL	15,000	0.34	
4860-0022-0017	208-15	133	SEC CLEAN GRINDING	8760	APM	2,000	0.04	
4860-0024-0003	208-12	177	BRAN DRYER	8760	CORONA CYCLONE	6,888	1.42	
4912-0006-0017	203-02	180	TRACK 16 BULK RAIL LDOUT	8760	WEIDENMAN LFT 2X7	30,000	0.67	
4860-0017-0073	202-07	181	FLAKING GEN ASP	8760	AERODYNE 7500 SVC	16,000	0.36	
4860-0023-0001	201-02	182	GERM DUSTERS ASP	8760	APM 40120.8	7,400	0.17	
4860-0017-0003	201-12		GERM DRYER	8760	CYCLONE	10,000	2.06	
4860-0017-0072			GERM ROLLS ASPIRATION	8760	CYCLONE	5,000	1.03	
4860-0019-0003	208-11	124	FTS DRYER ASPIRATION	8760	CORONA 15 CYCLONE	6,888	1.42	
4860-0024-0037	208-04	117	PET BRAN KICE LITES ASP	8760	MICROPUL	1,600	0.04	
4860-0017-0026			BIN 945 GERM RECEIVER	8760	BUHLER 36S-6-30	1,800	0.04	
					Subtotal	921,130	26.0	
~~PEUG3 CORN OIL EXTRACTION~~								
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
~~4861-0006-0005~~	~~204-02~~	~~179~~	~~CORN EXTRACTOR, DISTILLATION, DT~~	~~8760~~	~~MIN OIL ABSORBER~~	0	MACT hex loss	0
~~4861-0003-0018~~	~~205-01~~	~~141~~	~~CORN MEAL DC PLANT #2~~	~~8760~~	~~MAC CYCLONE~~	0	0.00	
					Subtotal	0	0.00	0
PEUG4 ~~SOYBEAN PREPERATION~~ CORN MILL PRODUCT STORAGE								
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
	General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.			0.00060	gr/acf			
~~4750-0038-0003~~	~~215-01~~	~~134~~	~~E-W DRYER~~	~~8760~~	~~DUCON CYCLONE~~	0	0.00	
~~4750-0036-0001~~	~~215-02~~	~~175~~	~~E-W BEAN CLEANING ASP/DEHULL~~	~~8760~~	~~484RF12~~	0	0.00	
~~4750-0029-0042~~	~~201-03~~	~~94~~	~~6TH FLOOR DEHULL~~	~~8760~~	~~MICROPUL 100S-6-20~~	0	0.00	
~~4750-0017-0043~~	~~208-17~~	~~95~~	~~BEAN CONDITIONER~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
~~4750-0018-0043~~	~~208-18~~	~~98~~	~~FLAKER ASP FLAKING SYSTEM~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
4912-0008-0006	202-03	111	BLDG 201/202 VACUUM	8760	HOFFMAN	700	0.02	
4912-0009-0005	208-09	121	BLDG 208 VACUUM	8760	HOFFMAN	700	0.02	
4750-0029-0074	201-20		~~HULLS GENERAL~~ HOMINY FEED BINS ASPIRATION	8760	DONALDSON 276RFW12	21,000	0.47	
~~4860-0018-0003~~	~~208-11~~	~~124~~	~~FTS DRYER~~	~~8760~~	~~CORONA 15 CYCLONE~~	0	0.00	
					Subtotal	22,400	0.50	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
~~PEUG5 SOYBEAN OIL EXTRACTION~~								
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
~~4750-0007-0004~~	~~204-01~~	~~136~~	~~SOLVENT EXT SOLVENT RECLAIM~~	~~8760~~	~~MIN OIL ABSORBER~~	0	Consent Decree	0
~~4750-0002-0018~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #1~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0020~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #2~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0022~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #3~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0024~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #4~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
					Subtotal	0	0.00	0
PEUG6 SOYBEAN CORN MILL PRODUCTS MILLING AND HANDLING								
	General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.			0.00060	gr/acf			
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
4750-0029-0032	201-01	92	~~MEAL~~ HOMINY BINNING	8760	APM 40240.8	30,000	0.67	
4750-0029-0001	201-10	101	~~MEAL~~ HOMINY GRIND GEN ASP	8760	APM 40224.4	21,000	0.47	
~~4750-0023-0017~~	~~202-02~~	~~110~~	~~KAOLIN/CALCIUM BIN REC~~	~~8760~~	~~APM 16050.8~~	2,600	0.06	
4912-0004-0022	225-01	126	TRUCK ~~MEAL~~ HOMINY LOADOUT	8760	376RF8	34,960	0.78	
4912-0003-0011	226-01	127	RAIL ~~MEAL~~ HOMINY/GRAIN LOADOUT #1	8760	376RF12	34,960	0.78	
~~4750-0029-0061~~	~~212-02~~	~~128~~	~~MEAL BINNING~~	~~8760~~	~~WEIDENMAN~~	15,640	0.35	
4750-0033-0001	234-01	130	LTMS & RAIL HOMINY/GRAIN TRANSFER	8760	376RF8	20,000	0.45	
4750-0033-0011	234-02	130	LTMS & RAIL HOMINY/GRAIN LOADOUT	8760	MAC 144MCF416	34,600	0.77	
4750-0025-0015	201-19		~~HULL~~ FLOUR PELLET COOLER	8760	MAC HE 39	8,000	2.55	
4750-0029-0045			~~MEAL~~ HOMINY SCREENER GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.17	
4750-0033-0000A			LTMS TRUCK/RAIL HOMINY/GRAIN DUMP	75,000 tons	-	-	0.01	
4750-0033-0000B			LTMS TRUCK HOMINY/GRAIN LOADOUT	75,000 tons	-	-	0.4	
4912-0000-0000			~~MEAL~~ HOMINY LOADOUT FUGITIVES	2801	-	-	1.9	
4912-0000-0001			GRAIN LOADOUT FUGITIVES	5867			0.10	
					Subtotal	209,360	9.4	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
BOILER HOUSE/GROUNDS								
			General: Base emissions on best estimate.	0.005	gr/acf			
			Coal receiving:	0.02	#/ton received			
FM-26		143	B&W TYPE FM PACKAGE BOILER	8,760	LOW NOx			
~~CFB BOILER~~		~~144~~	~~CFB FLUIDIZED BED BOILER~~	~~8,760~~	~~BAGHOUSE & NOx Red~~			
~~F-1000~~			~~COAL RECEIVING FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-109~~			~~COAL CRUSHER FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-1001~~			~~ASH LOADOUT FUGITIVES~~		~~fugitives~~		0.00	
~~CR-104~~			~~REINJECTION BIN~~	~~8,760~~	~~M2~~	0	0.00	
~~F-104~~			~~COAL BUNKER~~	~~8,760~~	~~M3~~	0	0.00	
~~F-105~~			~~LIMESTONE SILO~~	~~8,760~~	~~M4~~	0	0.00	
~~F-103~~			~~COAL SILO~~	~~8,760~~	~~M5~~	0	0.00	
~~F-101~~			~~ASH SILO PNEUMATIC RECEIVER~~	~~8,760~~	~~M6~~	0	0.00	
~~F-102~~			~~ASH SILO BINVENT & LOADOUT FILTER~~	~~8,760~~		0	0.00	
~~CR-104A~~			~~SYSTEM C STORAGE~~	~~8,760~~	~~M7~~	0	0.00	
~~F-108~~			~~COAL HANDLING~~	~~8,760~~	~~F-108~~	0	0.00	
DG-100		152	EMERGENCY GENERATOR	39				
TK-108		153	FUEL OIL TANK	8,760	150,000 GAL			0.016
~~L-OIL-3~~			~~GASOLINE VEHICLE TANK~~	~~8,760~~	~~500 gallons~~			0.000
					Subtotal	0	0.0	0.016

TOTAL PLANT

	PM10	SO2	NOx	NMVOC	CO	Pb	HAPS n-hexane	HAPS HF	HAPS HCl	NH3	Hg	PM2.5
	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
process sources	55.2	0	0	0.0	0	0	0					9.4
~~solvent extraction~~												
~~CFB~~												
B&W Type FM boiler	22.95	65.75	126.23	6.14	93.77	0	17.6			6.70	0.00095	2.12
fuel handling				0.016								
TOTAL PLANT	78.2	65.8	126.2	6.2	93.8	0.0	17.6	0.0	0.0	6.7	0.00095	11.51

TOTAL PLANT	293.9
GRAND TOTAL	294

FEE	$18.00	PER TON
ANNUAL FEE	$5,292.00	

BUNGE

Enhancing the Value of America's Harvest[SM]

June 14, 2010

LeeAnne Kinsella
Permit Section, CAAPP Group
Illinois Environmental Protection Agency
Division of Air Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62702

Bunge North America, Inc.
321 E. North Street, Danville
ID No. 183020ABT
CAAPP Permit
Minor Title V Permit Modification Application

Dear Ms. Kinsella:

Please find enclosed two copies of an application package for a minor modification to the CAAPP permit for our Bunge – Danville, Illinois facility. The facility currently has an operating permit Application No. 96020027.

The enclosed application is submitted for the following reasons:
1. Eliminate certain sources from the permit,
2. Eliminate permit conditions applicable to the eliminated sources,
3. Change the names of several sources which change does not increase potential or actual emissions, and
4. Reduce the permitted emissions resulting from 1 above.

If you have any questions about this permit application package, please do not hesitate to contact Bob Henricks at (314) 292-2342, email robert.henricks@bunge.com.

Sincerely,
Bunge North America, Inc.

Dean Hughes
Eastern Regional Manager - Milling

Enclosure: Application original and 1 copy

p.c.: Aric Silver, corp. file

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL – PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

APPLICATION FOR MODIFICATION TO A CAAPP PERMIT (CHECK ONLY ONE)	**FOR AGENCY USE ONLY**
☐ SIGNIFICANT MODIFICATION	ID NO.:
X MINOR MODIFICATION	PERMIT NO.:
	DATE:

SECTION ONE — SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2) SOURCE ID NO.: 183020ABT

3) DATE FORM PREPARED: 6/8/2010

SECTION TWO — INSTRUCTIONS IN BRIEF

1) COMPLETE THE FOLLOWING FORM WHEN APPLYING FOR A SIGNIFICANT OR MINOR MODIFICATION.

2) PROVIDE COMPLETED FORMS FOR THE AGENCY TO USE TO NOTIFY USEPA AND AFFECTED STATES AS REQUIRED UNDER SUBSECTIONS 8 AND 9 OF 39.5 OF THE ENVIRONMENTAL PROTECTION ACT. (COMPLETION OF THIS FORM FULFILLS THIS REQUIREMENT.)

3) FOR A CHANGE TO A COMBINED TITLE I/CAAPP PERMIT USING THE TITLE I/TITLE V PERMIT PROCESS, A SIGNIFICANT OR MINOR MODIFICATION REQUEST THAT WILL REVISE EXISTING APPLICABLE PERMIT CONDITIONS, A *T1R REQUEST*, OR ESTABLISH NEW CONDITIONS, A *T1N REQUEST*, WILL ADDITIONALLY NEED TO INCLUDE WITH THIS REQUEST A COMPLETED "REQUEST FOR A TITLE 1 INCORPORATION INTO THE CAAPP: T1, T1 REVISED (T1R), AND/OR T1 NEW (T1N)" FORM 283-CAAPP.

4) A SIGNIFICANT MODIFICATION REQUEST WILL REQUIRE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64 FOR EMISSION UNITS WITH POST-CONTROL EMISSIONS GREATER THAN OR EQUAL TO THE MAJOR SOURCE THRESHOLD.

5) THE APPLICATION SHOULD INCLUDE A DESCRIPTION OF THE PROPOSED CHANGE(S), ANY PHYSICAL CHANGES IN EQUIPMENT, CHANGES IN THE METHOD OF OPERATION, CHANGES IN EMISSIONS, AND ANY NEW APPLICABLE REQUIREMENTS WHICH WILL APPLY AS A RESULT OF THE PROPOSED CHANGE.

6) TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE THIS FORM FOR A SIGNIFICANT MODIFICATION. TO DECREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE A 273-CAAPP "REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT".

7) REFER TO 271-CAAPP INSTRUCTIONS FOR FURTHER GUIDANCE ON COMPLETING THIS FORM.

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____
AUTHORIZED SIGNATURE

Dean Hughes
TYPED OR PRINTED NAME OF SIGNATORY

Eastern Regional Manager - Milling
TITLE OF SIGNATORY

06 / 14 / 2010
DATE

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE

APPLICATION PAGE 1ER

SECTION THREE	MODIFICATION INFORMATION		
	PERMIT MODIFICATION RATIONALE		
	WHY IS THE APPLICANT APPLYING FOR A MODIFICATION? (CHECK ALL THAT APPLY)	YES	NO
1)	THE APPLICANT REQUESTS TO CHANGE A CURRENT TITLE 1 LIMIT OR OTHER LIMIT.	☐	☐
2)	THE APPLICANT REQUESTS TO INCORPORATE A NEW OR MODIFIED RULE.	☐	☐
3)	THE APPLICANT REQUESTS TO INCORPORATE A CONSTRUCTION PERMIT.	☐	☐
4)	THE APPLICANT REQUESTS TO CHANGE PERMIT REQUIRMENTS (E.G., MONITORING, RECORDKEEPING, REPORTING, ETC.).	☐	☐
5)	THE APPLICANT REQUESTS TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES.	☐	☐
6)	THE APPLICANT REQUESTS TO MODIFY A COMPLIANCE PROCEDURE.	☐	☐
7)	OTHER (DESCRIBE): Change of source names, delete sources and decrease permitted emission levels	X	☐
	FOR MINOR PERMIT MODIFICATION		
	IF REQUESTING A MINOR PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
8)	WOULD THE REQUEST VIOLATE ANY APPLICABLE REQUIREMENT?	☐	X
9)	WOULD THE REQUEST INVOLVE SIGNIFICANT CHANGES TO EXISTING MONITORING, REPORTING, OR RECORDKEEPING REQUIREMENTS IN THE PERMIT?	☐	X
10)	WOULD THE REQUEST REQUIRE A CASE-BY-CASE DETERMINATION OF AN EMISSION LIMITATION OR OTHER STANDARD, OR A SOURCE-SPECIFIC DETERMINATION OF AMBIENT IMPACTS, OR A VISIBILITY OR INCREMENT ANALYSIS?	☐	X
11)	WOULD THE REQUEST SEEK TO ESTABLISH OR CHANGE A PERMIT TERM OR CONDITION FOR WHICH THERE IS NO CORRESPONDING UNDERLYING REQUIREMENT AND WHICH AVOIDS AN APPLICABLE REQUIREMENT TO WHICH THE SOURCE WOULD OTHERWISE BE SUBJECT?	☐	X
12)	WOULD THE REQUEST BE A MODIFICATION UNDER ANY PROVISION OF TITLE I OF THE CLEAN AIR ACT?	☐	X
13)	WOULD THE REQUEST BE REQUIRED TO BE PROCESSED AS A SIGNIFICANT MODIFICATION? NOTE: PURSUANT TO 39.5(14) PERMIT MODIFICATIONS, IF THE APPLICANT ANSWERED "YES" TO ANY OF THE ABOVE QUESTIONS 8-13, THE MODIFICATION IS NOT CONSIDERED A MINOR PERMIT MODIFICATION AND WILL NEED TO BE SUBMITTED AS A SIGNIFICFANT MODIFICATION. PROCEED TO QUESTIONS 18-22.	☐	X
	DOES THE MINOR PERMIT MODIFICATION APPLICATION INCLUDE THE FOLLOWING:		
14)	A DESCRIPTION OF THE CHANGE, THE EMISSIONS RESULTING FROM THE CHANGE, AND ANY NEW APPLICABLE REQUIREMENTS THAT WILL APPLY IF THE CHANGE OCCURS?	X	☐
15)	THE SOURCE'S SUGGESTED DRAFT PERMIT (E.G., REDLINE, TRACKED CHANGES VERSION)?	X	☐
16)	A CERTIFICATION BY A RESPONSIBLE OFFICIAL THAT THE PROPOSED MODIFICATION MEETS THE CRITERIA FOR USE OF MINOR PERMIT MODIFICATION PROCEDURES (E.G., THE SIGNATURE AT THE TOP OF THIS FORM)?	X	☐
17)	UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION REQUEST, WILL THE SOURCE COMPLY WITH BOTH THE APPLICABLE REQUIREMENTS GOVERNING THE CHANGE AND THE PROPOSED PERMIT TERMS AND CONDITIONS? NOTE: UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION, THE SOURCE NEED NOT COMPLY WITH THE EXISTING PERMIT TERMS AND CONDITIONS IT SEEKS TO MODIFY.	X	☐
	FOR SIGNIFICANT PERMIT MODIFICATION		
	IF REQUESTING A SIGNIFICANT PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
18)	THE PERMIT MODIFICATION WOULD NOT QUALIFY AS EITHER MINOR PERMIT MODIFICATION OR AS ADMINISTRATIVE PERMIT AMENDMENTS?	☐	☐
19)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WILL REQUIRE A SIGNIFICANT CHANGE IN EXISTING MONITORING TERMS OR CONDITIONS?	☐	☐
20)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION FOR A RELAXATION OF REPORTING OR RECORDKEEPING REQUIREMENTS?	☐	☐
21)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WOULD REQUIRE DECISIONS TO BE MADE ON TECHNICALLY COMPLEX ISSUES?	☐	☐
22)	IF A MODIFICATION CHANGES OR EFFECTS PREVIOUSLY SUBMITTED INFORMATION (E.G., ALTERING ESTABLISHED MONITORING), DOES THIS APPLICATION INCLUDE A REVISED 200-CAAPP AND OTHER ASSOCIATED DATA OR FORMS NEEDED TO DOCUMENT THE REQUEST?	☐	☐

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation:
_____

REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT	FOR AGENCY USE ONLY
	ID NUMBER:
	PERMIT #:
	DATE:

GENERAL INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2a) ID NUMBER (IF KNOWN): 183020ABT	b) CAAPP PERMIT NUMBER: 96020027
3) ENVIRONMENTAL CONTACT PERSON: Aric Silver	4) CONTACT PERSON'S TELEPHONE NUMBER: 217-443-9784

AMENDMENT DATA

5) AN ADMINISTRATIVE PERMIT AMENDMENT SHALL ONLY BE USED FOR ONE OR MORE OF THE FOLLOWING REVISIONS TO A CAAPP PERMIT (PLEASE INDICATE THE TYPE OF AMENDMENT(S)):

☐ A) CORRECTS TYPOGRAPHICAL ERRORS;

☐ B) IDENTIFIES A CHANGE IN THE NAME, ADDRESS, OR PHONE NUMBER OF ANY PERSON IDENTIFIED IN THE PERMIT, OR PROVIDES A SIMILAR MINOR ADMINISTRATIVE CHANGE AT THE SOURCE;

☐ C) REQUIRES MORE FREQUENT MONITORING OR REPORTING BY THE PERMITTEE; OR

☐ D) ALLOWS FOR A CHANGE IN OWNERSHIP OR OPERATIONAL CONTROL OF THE SOURCE WHERE NO OTHER CHANGE IN THE PERMIT IS NECESSARY, PROVIDED THAT A WRITTEN AGREEMENT CONTAINING A SPECIFIC DATE FOR TRANSFER OF PERMIT RESPONSIBILITY, COVERAGE, AND LIABILITY BETWEEN THE CURRENT AND NEW PERMITTEES HAS BEEN SUBMITTED TO THE ILLINOIS EPA.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

AMENDMENT DATA (CON'T)

6) DESCRIPTION OF REQUESTED ADMINISTRATIVE PERMIT AMENDMENT:

	CURRENT PERMIT INFORMATION	AMENDED PERMIT INFORMATION
1)	Specific source names	Revised source names
	PEUG3	Delete from the permit
2)	PEUG4	Revise unit name
	PEUG5	Delete from the permit
3)	PEUG6	Revise unit name
	Boiler House/Grounds	Delete CFB Boiler and support systems (coal, limestone & ash) from the permit
4)		
5)		
6)		
7)		
8)		

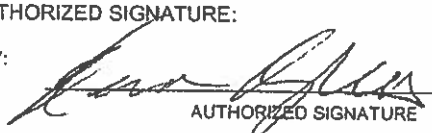
7) DOES THE APPLICATION INCLUDE A COPY OF THOSE PARTICULAR PAGES OF THE CAAPP PERMIT WHICH ARE CLEARLY MARKED TO SHOW THE REQUESTED AMENDMENT? YES ☐ YES ☐ NO

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

8) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: 

AUTHORIZED SIGNATURE

Dean Hughes

TYPED OR PRINTED NAME OF SIGNATORY

Eastern Regional Manager - Milling

TITLE OF SIGNATORY

06 / 14 / 2010

DATE

APPLICATION PAGE 4ER

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273-CAAPP

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

FEE DETERMINATION FOR CAAPP SOURCE

FOR AGENCY USE ONLY
ID NO.:
PERMIT NO.:
DATE:

SECTION ONE SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.
2) SOURCE ID NO.: 183020ABT
3) DATE FORM PREPARED: 6/8/2010

SECTION TWO INSTRUCTIONS IN BRIEF

1) COMPLETE THIS FORM TO DETERMINE THE PERMIT FEE ESTABLISHED BY THE CAAPP PERMIT.
2) THE EMISSION LEVELS STATED IN SECTION FOUR, WHICH ARE ONLY USED FOR THE PURPOSE OF PERMIT FEE DETERMINATION, WILL BECOME PERMIT SPECIAL CONDITIONS IN THE CAAPP PERMIT.
3) THE ILLINOIS EPA DOES NOT REQUIRE PAYMENT WITH THIS APPLICATION. WHEN YOU ARE BILLED MAKE CHECK OR MONEY ORDER PAYABLE TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. SEND TO THE ADDRESS AT THE TOP OF THIS FORM. DO NOT SEND CASH. ON THE CHECK MEMO LINE, PLEASE LIST "CAAPP OPERATING PERMIT FEE: ID NO. XXXXXXXXX", REPLACE THE Xs WITH YOUR SOURCE ID NUMBER.

SECTION THREE FEE RATIONALE

1) WHAT IS THE PERMIT STATUS AT THE TIME OF THIS REQUEST? CHECK ONLY ONE BELOW.

☐ INITIAL CAAPP PERMIT X RENEWAL CAAPP PERMIT ☐ FESOP INITIAL/RENEWAL
☐ SIGNIFICANT MODIFICATION ☐ MINOR MODIFICATION ☐ ADMINISTRATIVE AMENDMENT

2) COMPLETE THE BELOW TABLE FOR A NON-INITIAL CAAPP PERMIT. IF THERE IS AN INCREASE/DECREASE IN EMISSIONS, ENTER THE NUMBER(S) FOR THE EMISSIONS CHANGE RATIONALE AS APPROPRIATE.

POLLUTANT	INCREASE	DECREASE	NO CHANGE	EMISSIONS CHANGE RATIONALE(S)
NITROGEN OXIDES (NO_X)	☐	X	☐	
PARTICULATE MATTER (PART)	☐	X	☐	
SULFUR DIOXIDE (SO_2)	☐	X	☐	
VOLATILE ORGANIC MATERIAL (VOM)	☐	X	☐	
OTHER (SPECIFY) n-Hexane	☐	X	☐	
OTHER (SPECIFY)	☐	☐	☐	

Removal of processes at the source and reduction of permitted emission limits.

CHANGE RATIONALE:
1 BUSINESS DECISION (E.G., OPERATING NEEDS, BANKRUPTCY, ETC.).
2 REMOVAL OR ADDITION OF PROCESSES AT THE SOURCE.
3 INCLUSION OR REMOVAL OF A CONTROL DEVICE.
4 CHEMICAL REFORMULATION (E.G., REFORMULATING A COATING FROM HIGH VOM TO A LOW VOM).
5 FUEL SWITCHING (E.G., COAL TO NATURAL GAS, ETC.).
6 METHODOLOGY CHANGE (E.G., SWITCHING A PETROLEUM SOLVENT TO AQUEOUS SOLUTION).
7 CHANGES IN METHOD USED FOR CALCULATIONS (E.G., EMISSION FACTOR CHANGE).
8 OTHER (DESCRIBE): _____
9 OTHER (DESCRIBE): _____

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

APPLICATION PAGE 5ER

FOR APPLICANT'S USE

SECTION FOUR FEE DATA

1) WILL THE SOURCE PAY THE CURRENT MAXIMUM FEE OF $250,000.00 PER YEAR? ☐ YES X NO

IF YES, THE REMAINDER OF THIS FORM DOES NOT NEED TO BE COMPLETED.

2) EMISSION UNIT [A]	NITROGEN OXIDES (NO_X) (TONS/YR)	PARTICULATE MATTER (PART) (TONS/YR)	SULFUR DIOXIDE (SO_2) (TONS/YR)	VOLATILE ORGANIC MATERIAL (VOM) (TONS/YR)	OTHER [B] SPECIFY n-Hexane (TONS/YR)
PEUG1		19.4			
PEUG2		26.0			
PEUG4		0.5			
PEUG6		9.4			
Boiler & Grounds	126.23	22.95	65.75	6.2	17.6
				Note: n-hexane is not included in the VOC emissions	
3) SUBTOTAL	126.23	78.2	65.8	6.2	17.6
4) FUGITIVE	Included in the above				
5) TOTAL	126.23	78.2	65.8	6.2	17.6

6) GRAND TOTAL ACROSS POLLUTANTS (TONS/YR):	294
7) CALCULATED PERMIT FEE: IF GRAND TOTAL IN ITEM 6 ABOVE IS > 100 TONS/YR THEN MULTIPLY GRAND TOTAL BY $18.00 AND ENTER, OTHERWISE ENTER $1,800.00:	$5,292
8) MINIMUM PERMIT FEE IS $1,800.00 PER YEAR. MAXIMUM PERMIT FEE IS $250,000.00 PER YEAR. IF THE CALCULATED PERMIT FEE IN ITEM 7 ABOVE IS BETWEEN THESE TWO FEE AMOUNTS THEN ENTER HERE, OTHERWISE ENTER THE MINIMUM OR MAXIMUM PERMIT FEE, WHICHEVER IS APPLICABLE. THIS IS THE ACTUAL ANNUAL PERMIT FEE:	$5,292

A EMISSION UNIT - PROVIDE THE NAME AND FLOW DIAGRAM DESIGNATION OF THE EMISSION UNIT AS IT APPEARS ON THE DATA AND INFORMATION FORM.

B OTHER - ANY HAZARDOUS AIR POLLUTANT (HAP) NOT INCLUDED ELSEWHERE, E.G., CHLORINE, HCl, ETC.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

SUPPLEMENT TO CAAPP APPLICATION

FOR AGENCY USE ONLY
ID NUMBER:
PERMIT #:
DATE:

THIS FORM SHALL ACCOMPANY ANY SUPPLEMENT TO A CAAPP APPLICATION, THAT IS, ANY SUBMITTAL OF NEW OR CORRECTED INFORMATION FOR A PENDING CAAPP APPLICATION.

SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2) DATE FORM PREPARED: May 20, 2010

3) SOURCE ID NO. (IF KNOWN): 183020ABT

SUPPLEMENT INFORMATION

4) DOES THIS SUPPLEMENT PROVIDE ADDITIONAL INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF NEW PAGES IN THIS SUPPLEMENT: _____

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	NEW PAGE #(S)
Elimination of solvent extraction and coal-fired boiler system		
and support facilities (coal. limestone & ash material handling)		
271CAAPP		1ER - 2ER
273CAAPP		3ER & 4ER
292CAAPP		5ER & 6ER
505CAAPP		7ER & 8ER
EMISSIONS SPREADSHEET		9ER - 22ER
Marke-up of curent permit - submitted electronically		

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE

APPLICATION PAGE 7ER

5) DOES THIS SUPPLEMENT CORRECT PREVIOUSLY SUBMITTED INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF REVISED PAGES IN THE SUPPLEMENT: _____

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	OLD PAGE #(S)	NEW PAGE #(S)
SEE CROSSED OUT UNIT SOURCE NAMES			
ON TITLE V MOD 2010 MAX PERMITTED			
EMISSIONS SPREADSHEET.			
ALSO, NEW OR CHANGED UNIT SOURCE			
NAMES ARE UNDERLINED.			
CROSSED OUT UNIT SOURCE NAMES			
ARE REQUESTED TO BE REMOVED FROM			
THE PERMIT. (EXAMPLE: "CFB FLUIDIZED			
BED BOILER" IS TO BE REMOVED FROM			
THE PERMIT.)			

SIGNATURE BLOCK

6) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION, AS AMENDED BY THIS SUPPLEMENT, ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____ (AUTHORIZED SIGNATURE)

Eastern Regional Manager - Milling (TITLE OF SIGNATORY)

Dean Hughes (TYPED OR PRINTED NAME OF SIGNATORY)

06 / 24 / 2010 (DATE)

APPLICATION PAGE 8ER

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505-CAAPP

BUNGE MILLING, INC.
Facility ID 183020ABT

8-Jun-10

EMISSIONS INVENTORY REPORT
WORKSHEET

YEAR- MAX

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
PEUG1 Corn & Soybean Receiving, Cleaning and Storage								
	Base emissions on 1999 PM test on 5012-0005-0021 filter exhaust.			0.0017	gr/acf			
	Base emissions on 2000 PM10 test on 4880-0034-0069 filter exhaust.			0.00085	gr/acf			
	Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.			0.00060	gr/acf			
Pre NSPS								
5012-0001-0016	301-02	1	TRUCK DUMP #1	8760	APM 40072.10	18,500	1.2	
5012-0010-0054	301-05	9	HOFFMAN BLDG 301 VAC	8760	HOFFMAN 48X96	1,000	0.1	
5012-0005-0029	301-01	10	WEST HDHS TRANS GEN ASP	8760	DD 484RF12	55,000	3.4	
5012-0003-0013	311-03	11	RHOMBO TRUCK DUMP #3	8760	APM SJL156-6	14,500	0.9	
5012-0004-0016	304-02	132	RAIL DUMP	8760	APM 41120.12	27,000	1.7	
5012-0009-0009	311-01	230	RHOMBO WEST GEN ASP	8760	APM SJL72-6	6,800	0.4	
5012-0003-0018	311-02	231	RHOMBO GALLERY GEN ASP	8760	APM SJL72-6	9,200	0.6	
5012-0010-0047			TRACK 6 VACUUM	8760	HOFFMAN	700	0.04	
4870-0013-0015	110-08	23	CLEANINGS DISCHARGE	8760	BUHLER 16S-6-30	1,900	0.04	
4750-0029-0015	201-08	99	CONVEYING GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.24	
5012-0000-0000			GRAIN RECEIVING FUGITIVES	8760	-	-	5.4	
NSPS								
5012-0005-0021	301-04	8	TRUCK DUMP #4 & W GAL GEN ASP	8760	DD 484RF12	36,017	2.3	
4870-0013-0001	110-09	24	CLEANING NORTH APM	8760	APM 41216.12	41,000	1.3	
4880-0034-0069	115-02		CORN CLEANING	8760	TD 484RF12	57,372	1.8	
5012-0002-0012	310-01	6	NORTH ST GRAIN/MEAL TRUCK DUMP #2	8760	DD 484RF12	20,000	1.3	
					Subtotal	276,589	19.4	
PEUG2 Dry Corn Milling, Processing and Products Handling								
	Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.			0.00060	gr/acf			
	Base emissions on 2000 PM10 test on 4880-0034-0077 filter exhaust.			0.00060	gr/acf			
4870-0010-0055	110-04	19	BEMIS BAGGING	8760	APM 16019.8	1,660	0.04	
4870-0010-0030	110-05	20	BAGGING GEN ASP	8760	APM 40020.8	3,400	0.08	
4870-0013-0019	110-07	22	BAGGING PACKER GEN ASP	8760	APM 14042.8	4,400	0.1	
4880-0042-0057	109-04	213	BRAN DRYER PROCESS	8760	APM 14036.8	2,200	0.05	
4880-0042-0062	109-03	214	BRAN SIFTER PROCESS	8760	APM 10144.8	6,215	0.1	
4880-0034-0054	109-02	215	EAST MEAL DRY/COOL	8760	APM 40120.10	13,000	0.3	
4880-0034-0059	109-01	216	WEST MEAL DRY	8760	APM 40144.8	13,295	0.3	
4880-0034-0035	105-06	217	S APM BINNING	8760	APM 41144.12	30,000	0.7	
4880-0034-0027	105-05	218	8TH FR DRACCO SCREENING	8760	DRACO 6MB-60	42,000	0.9	
4880-0034-0001	105-04	219	9TH FR DRACCO SCREENING	8760	DRACO 8MB-72	69,500	1.6	
4880-0032-0052	105-03	220	BLDG 105 VACUUM	8760	HOFFMAN	1,500	0.03	
4870-0021-0001	104-02	221	BULK LOADING WHITE GOODS	8760	DD 484RF12	36,000	0.8	
4870-0015-0016	104-01	222	BLDG 104 VACUUM	8760	HOFFMAN 38405A	1,500	0.03	
4880-0042-0054	103-06	223	BRAN BIN	8760	BUHLER 16S-6-30	980	0.02	
4880-0008-0028	103-05	224	6TH FLR SCREENING	8760	WIEDENMANN 2X4 LF150-1200	10,000	0.2	
4880-0008-0040	103-04	225	W 4TH FLR GRAVITY TABLES	8760	WIEDENMANN 2X5 LF225-2250	10,000	0.2	
4880-0034-0010	101-05	226	S LUNCHROOM SCREENING	8760	CD 484RF12	42,000	0.9	
4880-0034-0042	101-04	227	S CD SCREENING	8760	CD 484RF12	37,500	0.8	
4880-0034-0048	101-02	228	N CD GEN ASPIRATION	8760	CD 484RF12	30,000	0.7	
4880-0034-0019	101-01	229	N LUNCHROOM SCREENING	8760	CD 484RF12	36,000	0.8	
4870-0013-0024	115-01		PACKAGE & BULK LOADING	8760	TD 484RF12	42,000	0.9	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4880-0034-0077	115-03		CAMAS/BRAN	8760	TD 484RF12	45,021	1.0	
4880-0034-0071	115-04		THRU & TAIL STOCK DRYERS	8760	TD 484RF12	56,000	1.25	
4880-0032-0070	115-05		BLDG 115 VACUUM	8760	HOFFMAN	825	0.02	
4870-0005-0003			TRACK 2 UNLOAD SEC REC	8760	USS INC.	440	0.014	
4880-0009-0005			GERM GEN ASP	8760	APM 16030.4			
4932-0001-0001	348-01	87	LAB FILTER	8760	APM 14106.4	900	0.1	
4900-0003-0039	112-12A	70	AB FIN PROD SURGE NORTH	8760	MICROPUL 8B	742	0.02	
4900-0003-0045	112-12B	70	AB FIN PROD SURGE SOUTH	8760	MICROPUL 8B	742	0.02	
4990-0005-0012	112-13A	71	1/2 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0005-0042	112-13B	71	1/2 PULVOCRON VISC FLOUR REC	8760	BUHLER 9-6-100	380	0.01	
4990-0002-0010	112-13C	71	3/4 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0004-0013	112-14A	72	9/10 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0003-0010	112-14B	72	7/8 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0002-0019	112-15A	73	#3 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0002-0022	112-15B	73	#4 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0001-0039	112-15B	73	#5 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0021	112-15C	73	#1 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0024	112-15D	73	#2 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0003-0019	112-18A	75	#7 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0003-0022	112-18B	75	#8 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0022	112-18C	75	#9 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0025	112-18D	75	#10 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0002-0008	112-19A	76	3/4 PULVN GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0005-0010	112-19B	76	1/2 PULV GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0004-0011	112-20A	77	9/10 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0003-0008	112-20B	77	7/8 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0005-0028	112-21A	78	1/2 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0002-0026	112-21B	78	3/4 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0003-0026	112-22A	79	7/8 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0004-0029	112-22B	79	9/10 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0006-0024	112-27	83	HIBOND VISC FLAKE ROLLER MILL	8760	APM 15066.8	7,200	0.16	
4820-0001-0029	103-01		CSM BLENDED FOOD REC	8760	APM 40070.7	4,077	0.09	
4820-0001-0052	103-02		BLENDED FOOD PACK	8760	APM 16150.6	10,000	0.22	
4900-0001-0068	111-01		ALLBOND VISC FLOUR GEN ASP	8760	BUHLER 16-8-100	867	0.02	
4820-0003-0007	111-03		MILK BINS	8760	MICROPUL 6B	400	0.01	
4990-0007-0049	111-04		300 SERIES BINNING	8760	MICROPUL 1F1	4,452	0.10	
4990-0001-0002	111-07		SOY MEAL GEN ASP	8760	APM 16022.4	1,435	0.03	
4990-0001-0006	111-08		SOY MEAL SURGE	8760	MICROPUL 6B	500	0.01	
4990-0001-0025	111-10		MEAL BIN COOLER	8760	APM 400072.10	9,158	0.20	
4990-0002-0043	111-12		3/4 SOY FLOUR REC	8760	APM16014.8	700	0.02	
4820-0003-0072	111-13		TRI CAL BINS	8760	APM 16009.8	780	0.02	
4900-0001-0058	111-14A		5/6 ALLOND REC	8760	APM 16014.8	1,100	0.02	
4990-0003-0032	111-14B		7/8 SOY FLOUR REC	8760	APM 16014.8	1,100	0.02	
4990-0002-0033	111-15A		BIN 308	8760	MICROPUL 6B	500	0.01	
4820-0002-0072	111-15B		BIN 509	8760	MICROPUL 6B	500	0.01	
4820-0002-0068	111-15C		BIN 508	8760	MICROPUL 6B	500	0.01	
4820-0003-0038	111-15D		BIN 310	8760	MICROPUL 6B	500	0.01	
4990-0002-0036	111-15E		BIN 309	8760	MICROPUL 6B	500	0.01	
4990-0004-0037	111-17		9/10 PULVICRON REC	8760	BUHLER 16-6-220	700	0.02	
4820-0002-0038	111-18		MILK BINS	8760	MICROPUL 21-6-220	807	0.02	
4820-0002-0035	111-19		MILK BIN BAG DUMP	8760	APM 14048.6	6,000	0.13	
4990-0007-0029	111-21		BLENDING BATCH BIN GEN ASP	8760	BUHLER 25S-6-30	1,250	0.03	
4990-0007-0036	111-22		BLENDER GEN ASP	8760	BUHLER 16S-6-30	1,055	0.02	
4990-0007-0032	111-23		BLENDING GEN ASP	8760	MICROPUL 36S-8-30	1,645	0.04	
4820-0003-0063	111-24		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	3,200	0.07	
4820-0003-0059	111-25		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	2,739	0.06	
4990-0006-0040	111-27		GEN ASPIRATION	8760	BUHLER 9-8-220	742	0.02	
4900-0001-0091	111-28		#5 SL GEN ASP & #5 EXPANDER	8760	APM 14024.6	3,000	0.07	
4990-0011-0001	111-29		FIBER REC GEN ASP	8760	BUHLER 9-8-220	648	0.01	
4820-0002-0011	111-30		PCM BINNING	8760	MICROPUL 1F1	2,241	0.05	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4870-0010-0005	111-34		CF BRAN PACKING BINNING	8760	MICROPUL 25-8-220	1,232	0.03	
4900-0005-0035	111-36		BLDG 111 VACUUM	8760	HOFFMAN 60X120	1,500	0.03	
4870-0006-0006	111-37		110/210 REC GEN ASP	8760	APM 16030.4	1,400	0.03	
4990-0011-0029	111-38		FIBER REC GEN ASP	8760	APM 16019.4	1,000	0.02	
4990-0001-0029	111-41		COOLING TOWER	8760	APM 40072.10	14,000	0.31	
4820-0003-0022	111-42		INGREDIENT BIN 601	8760	MICROPUL 4B	210	0.00	
4820-0003-0026	111-43		INGREDIENT BIN 602	8760	MICROPUL 4B	210	0.00	
4820-0003-0030	111-44		INGREDIENT BIN 603	8760	MICROPUL 2 1/2 B	210	0.00	
4820-0003-0034	111-45		INGREDIENT BIN 604	8760	APM 15105.4	210	0.00	
4820-0003-0018	111-46		MICRO INGR DUMP FILTER	8760	APM 15105.4	2,500	0.06	
4820-0003-0004	111-47		MIXER GEN ASP	8760	BUHLER 25S-6-30	1,500	0.03	
4900-0001-0065	112-03		3/4 HAMMERMILL	8760	APM 16009.6	1,258	0.03	
4900-0001-0006	112-04		#3 & #4 EXPANDERS	8760	APM 16009.6	1,017	0.02	
4900-0005-0001	112-05		REPROCESS GEN CD ROOF	8760	CD 376RF10	27,550	0.62	
4900-0001-0042	112-08		#6 PULV GRINDER	8760	BUHLER 37-8-220	2,904	0.06	
4900-0001-0046	112-09		5/6 PULV AB FIN PROD SURGE BIN	8760	MICROPUL 4B	570	0.01	
4900-0002-0032	112-10		PELLET BINS	8760	BUHLER 16S-6-30	705	0.02	
4900-0003-0017	112-11A		#1 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0020	112-11B		#2 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0023	112-11C		#3 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0026	112-11D		#4 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0029	112-11E		#5 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4990-0006-0027	112-11F		VISCOSITY FLOUR REC	8760	APM 16022.8	2,143	0.05	
4990-0011-0010	112-17		COND RECEIVER/SOY MEAL GRIND	8760	APM 16014.8	1,350	0.03	
4900-0005-0007	112-24		GRIND REJECT/SCRAP BIN	8760	MICROPUL 2 1/2B	500	0.01	
4900-0005-0029	112-29		BLDG 112 VACUUM	8760	HOFFMAN	500	0.01	
4900-0001-0030	112-30		AB GRIND SURGE BIN	8760	BUHLER 37-8-220	2,100	0.05	
4900-0005-0006	112-31		N DAY GEN ASP & #5 EXPANDER	8760	CD 484RF12	36,000	0.81	
4820-0001-0093			BLENDED FOODS FILTER	8760	DD 124RF10	5,080	0.11	
4750-0029-0027	202-01	109	ROUND BIN GEN ASP	8760	APM 14072.6	7,134	0.16	
4912-0002-0054	209-01	116	HOMINY TRUCK LDOUT ASP	8760	DD 484RF12	37,000	0.83	
4860-0018-0007	208-05	119	N HOMINY FEED	8760	MICROPUL	14,000	0.31	
4860-0018-0003	208-06	123	S HOMINY FEED	8760	MICROPUL	15,000	0.34	
4860-0022-0017	208-15	133	SEC CLEAN GRINDING	8760	APM	2,000	0.04	
4860-0024-0003	208-12	177	BRAN DRYER	8760	CORONA CYCLONE	6,888	1.42	
4912-0006-0017	203-02	180	TRACK 16 BULK RAIL LDOUT	8760	WEIDENMAN LFT 2X7	30,000	0.67	
4860-0017-0073	202-07	181	FLAKING GEN ASP	8760	AERODYNE 7500 SVC	16,000	0.36	
4860-0023-0001	201-02	182	GERM DUSTERS ASP	8760	APM 40120.8	7,400	0.17	
4860-0017-0003	201-12		GERM DRYER	8760	CYCLONE	10,000	2.06	
4860-0017-0072			GERM ROLLS ASPIRATION	8760	CYCLONE	5,000	1.03	
4860-0019-0003	208-11	124	FTS DRYER ASPIRATION	8760	CORONA 15 CYCLONE	6,888	1.42	
4860-0024-0037	208-04	117	PET BRAN KICE LITES ASP	8760	MICROPUL	1,600	0.04	
4860-0017-0026			BIN 945 GERM RECEIVER	8760	BUHLER 36S-6-30	1,800	0.04	
					Subtotal	921,130	26.0	
~~PEUG3 CORN OIL EXTRACTION~~								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	0.0055	gr/acf			
~~4861-0006-0005~~	~~204-02~~	~~179~~	~~CORN EXTRACTOR, DISTILLATION, DT~~	~~8760~~	~~MIN-OIL ABSORBER~~	0	MACT hex loss	0
~~4861-0003-0018~~	~~205-01~~	~~141~~	~~CORN MEAL DC PLANT #2~~	~~8760~~	~~MAC CYCLONE~~	0	0.00	
					Subtotal	0	0.00	0
PEUG4 SOYBEAN PREPERATION CORN MILL PRODUCT STORAGE								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	0.0055	gr/acf			
			General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.	0.00060	gr/acf			
~~4750-0036-0003~~	~~215-01~~	~~134~~	~~E-W DRYER~~	~~8760~~	~~DUCON CYCLONE~~	0	0.00	
~~4750-0036-0001~~	~~215-02~~	~~175~~	~~E-W BEAN CLEANING ASP/DEHULL~~	~~8760~~	~~484RF12~~	0	0.00	
~~4750-0029-0042~~	~~201-03~~	~~94~~	~~6TH FLOOR DEHULL~~	~~8760~~	~~MICROPUL 100S-6-20~~	0	0.00	
~~4760-0017-0043~~	~~208-17~~	~~95~~	~~BEAN CONDITIONER~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
~~4750-0018-0043~~	~~208-18~~	~~98~~	~~FLAKER ASP FLAKING SYSTEM~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
4912-0008-0006	202-03	111	BLDG 201/202 VACUUM	8760	HOFFMAN	700	0.02	
4912-0009-0005	208-09	121	BLDG 208 VACUUM	8760	HOFFMAN	700	0.02	
4750-0029-0074	201-20		~~HULLS GENERAL~~ HOMINY FEED BINS ASPIRATION	8760	DONALDSON 276RFW12	21,000	0.47	
~~4860-0019-0003~~	~~208-11~~	~~124~~	~~FTS DRYER~~	~~8760~~	~~CORONA 15 CYCLONE~~	0	0.00	
					Subtotal	22,400	0.50	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
~~PEUG6 SOYBEAN OIL EXTRACTION~~								
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
~~4750-0007-0004~~	~~204-01~~	~~136~~	~~SOLVENT EXT SOLVENT RECLAIM~~	~~8760~~	~~MIN OIL ABSORBER~~	0	Consent Decree	0
~~4750-0002-0018~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #1~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0020~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #2~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0022~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #3~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0024~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #4~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
					Subtotal	0	0.00	0
PEUG6 ~~SOYBEAN~~ CORN MILL PRODUCTS MILLING AND HANDLING								
	General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.			0.00060	gr/acf			
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
4750-0029-0032	201-01	92	~~MEAL~~ HOMINY BINNING	8760	APM 40240.8	30,000	0.67	
4750-0029-0001	201-10	101	~~MEAL~~ HOMINY GRIND GEN ASP	8760	APM 40224.4	21,000	0.47	
~~4750-0023-0017~~	~~202-02~~	~~110~~	~~KAOLIN/CALCIUM BIN REC~~	~~8760~~	~~APM 16050.8~~	2,600	0.06	
4912-0004-0022	225-01	126	TRUCK ~~MEAL~~ HOMINY LOADOUT	8760	376RF8	34,960	0.78	
4912-0003-0011	226-01	127	RAIL ~~MEAL~~ HOMINY/GRAIN LOADOUT #1	8760	376RF12	34,960	0.78	
~~4750-0029-0061~~	~~212-02~~	~~128~~	~~MEAL BINNING~~	~~8760~~	~~WEIDENMAN~~	15,640	0.35	
4750-0033-0001	234-01	130	LTMS & RAIL HOMINY/GRAIN TRANSFER	8760	376RF8	20,000	0.45	
4750-0033-0011	234-02	130	LTMS & RAIL HOMINY/GRAIN LOADOUT	8760	MAC 144MCF416	34,600	0.77	
4750-0025-0015	201-19		~~HULL~~ FLOUR PELLET COOLER	8760	MAC HE 39	8,000	2.55	
4750-0029-0045			~~MEAL~~ HOMINY SCREENER GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.17	
4750-0033-0000A			LTMS TRUCK/RAIL HOMINY/GRAIN DUMP	75,000 tons	-	-	0.01	
4750-0033-0000B			LTMS TRUCK HOMINY/GRAIN LOADOUT	75,000 tons	-	-	0.4	
4912-0000-0000			~~MEAL~~ HOMINY LOADOUT FUGITIVES	2801	-	-	1.9	
4912-0000-0001			GRAIN LOADOUT FUGITIVES	5867			0.10	
					Subtotal	209,360	9.4	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
BOILER HOUSE/GROUNDS								
			General: Base emissions on best estimate.	0.005	gr/acf			
			Coal receiving:	0.02	#/ton received			
FM-26		143	B&W TYPE FM PACKAGE BOILER	8,760	LOW NOx			
~~CFB BOILER~~		~~144~~	~~CFB FLUIDIZED BED BOILER~~	~~8,760~~	~~BAGHOUSE & NOx Red~~			
~~F-1000~~			~~COAL RECEIVING FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-109~~			~~COAL CRUSHER FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-1001~~			~~ASH LOADOUT FUGITIVES~~		~~fugitives~~		0.00	
~~CR-104~~			~~REINJECTION BIN~~	~~8,760~~	~~M2~~	0	0.00	
~~F-104~~			~~COAL BUNKER~~	~~8,760~~	~~M3~~	0	0.00	
~~F-105~~			~~LIMESTONE SILO~~	~~8,760~~	~~M4~~	0	0.00	
~~F-103~~			~~COAL SILO~~	~~8,760~~	~~M5~~	0	0.00	
~~F-101~~			~~ASH SILO PNEUMATIC RECEIVER~~	8,760	M6	0	0.00	
~~F-102~~			~~ASH SILO BINVENT & LOADOUT FILTER~~	~~8,760~~		0	0.00	
~~CR-104A~~			~~SYSTEM C STORAGE~~	~~8,760~~	~~M7~~	0	0.00	
~~F-108~~			~~COAL HANDLING~~	~~8,760~~	~~F-108~~	0	0.00	
DG-100		152	EMERGENCY GENERATOR	39				
TK-108		153	FUEL OIL TANK	8,760	150,000 GAL			0.016
~~L-OIL-3~~			~~GASOLINE VEHICLE TANK~~	~~8,760~~	~~500 gallons~~			~~0.000~~
					Subtotal	0	0.0	0.016

TOTAL PLANT

	PM10	SO2	NOx	NMVOC	CO	Pb	HAPS n-hexane	HAPS HF	HAPS HCl	NH3	Hg	PM2.5
	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
process sources	55.2	0	0	0.0	0	0	0					9.4
~~solvent extraction~~												
~~CFB~~												
B&W Type FM boiler	22.95	65.75	126.23	6.14	93.77	0	17.6			6.70	0.00095	2.12
fuel handling				0.016								
TOTAL PLANT	78.2	65.8	126.2	6.2	93.8	0.0	17.6	0.0	0.0	6.7	0.00095	11.51

TOTAL PLANT	293.9	FEE	$18.00	PER TON
		ANNUAL FEE	$5,292.00	
GRAND TOTAL	294			

217/782-2113

CONSTRUCTION PERMIT -- NSPS SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
321 East North Street
Danville, Illinois 61832

Application No.: 10050056 I.D. No.: 183020ABT
Applicant's Designation: Date Received: May 27, 2010
Subject: New Boilers and Alternative Service for Rail Loadout #1
Date Issued: November 30, 2010
Location: 321 E. North Street, Danville, Vermillion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of two boilers and use of existing Rail Loadout #1 for hominy and grain, as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

General Conditions for the Project

1.1 Introduction

a. This permit authorizes the installation of two gas and liquid fuel-fired boilers, a larger primary boiler and a smaller backup boiler (the affected boilers). The affected boilers will be relocated from other facilities owned by the Permittee.. These boilers will replace the existing coal-fired boiler and an existing backup boiler at the source. Those existing boilers, which are much larger than the new boilers, are no longer practical to operate as the Permittee has shut down the corn and soybean oil extraction operations at the source, with substantial reductions in its steam and electricity needs and in its emissions.

b. This permit also authorizes use of existing Rail Loadout #1 (the affected rail loadout) for hominy and grain.

1.2 Applicability of PSD and Status of Source

a. i. This permit is issued based on this project not constituting a major modification for purposes of the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, for any NSR pollutant. This is because it will not be accompanied by a significant increase in emissions of any NSR pollutant.

ii. In particular, for emissions of PM, PM_{10} and $PM_{2.5}$, this is because the potential emissions of the new boilers and the increase in emissions from the affected rail loadout will be less than the significant emission thresholds of the PSD rules, i.e., less than 25, 15, and 10 ton/year, respectively. (See Attachment 1.)

b. i. This permit is issued based on the source becoming a minor source for emissions of hazardous air pollutants (HAPs) due to the shutdown of the corn and soybean oil extraction operations and the coal-fired boiler at the source.

ii. When the new primary boiler begins operation, the emissions of HAPs from the source shall not exceed 8 tons per year of a single HAP and 20 tons per year of any combinations of such HAPs, so that the source is considered a minor source for HAPs.

1.3 Compliance Procedures for Emission Limits

a. The limits set by this permit for PM_{10} and $PM_{2.5}$ only address filterable particulate and no condensable particulate, consistent with 40 CFR 52.21(b)(50)(vi).

b. Compliance with annual limits set by this permit shall be determined from a running total of 12 months of data.

1.4 Retention and Availability of Records

All records required by this permit shall be retained on site for a period of at least five years and shall be readily available for inspection and copying by the Illinois EPA upon request. Any record retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

1.5 General Notification and Reporting Requirements

a. The Permittee shall notify the Illinois EPA of deviations from permit requirements within 30 days or as otherwise provided by an operating permit for the source. Reports shall describe the deviations, the probable cause of such deviations, the corrective actions taken, and any preventive measures taken.

b. Two copies of all notifications and reports required by this permit shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

Telephone: 217/782-5811 Fax: 217/782-6348

and one copy of all required notifications shall be sent to the Illinois EPA's regional office at the following address, unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Regional Field Office
2009 Mall Street
Collinsville, Illinois 62234

Telephone: 618/346-5120 Fax: 618/346-5155

1.6 Authorization for Operation

The Permittee is allowed to operate the affected boilers and affected rail loadout pursuant to this construction permit until a new or revised operating permit is issued addressing these units. This condition supersedes Standard Condition 6.

Unit-Specific Condition for the Primary Boiler (Affected Primary Boiler)

2.1 Description

A new primary boiler will be installed at the source. This boiler will be used as a primary boiler to provide steam to the plant. This boiler will burn natural gas as primary fuel and propane, distillate fuel oil (including biodiesel), and vegetable oil mix as secondary fuels. It will replace the existing coal-fired boiler. To minimize emissions of nitrogen oxides (NO_x), the burners for natural gas will be low-NO_x burners.

2.2 List of Emission Unit

Emission Unit	Description	Emission Control
Primary Boiler	Gas and liquid fuel-fired boiler, 96.6 mmBtu/hour rated heat input capacity B&W Model FM 1556, manufactured in 1967	Low-NO_x burners

2.3 Applicability Provisions and Emission Standards

a. The "affected primary boiler" for the purpose of these unit-specific conditions is the boiler described in Conditions 2.1 and 2.2.

b. Pursuant to 35 IAC, Chapter B, Subchapter c, emissions from the affected primary boiler shall not exceed the following standards, which apply on an hourly basis:

Pollutant	Standard	Limit
PM	35 IAC 212.206	0.10 lb/mmBtu*
SO_2	35 IAC 214.161(b)	0.3 lb/mmBtu*
CO	35 IAC 216.121	200 ppm, @ 50% excess air

* Limit is applicable to emissions attributable to burning of liquid fuel.

c. Pursuant to 35 IAC 212.123(a), the opacity of the exhaust from the affected boiler shall not exceed 30 percent, except as provided in 35 IAC 212.123(b).

2.4 Non-applicability Provisions

a. This permit is issued based on the affected primary boiler not being subject to the New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. This is because the affected boiler was manufactured before June 9, 1989 and has not undergone and will not be undergoing modification or reconstruction as defined in 40 CFR 60.2 and 60.15(b), respectively.

b. This permit is issued based on the affected primary boiler not being subject to a case-by-case determination of Maximum Achievable Control technology (MACT) pursuant to Section 112(g) of the Clean Air Act because the source, including the affected primary boiler, will not be a major source of emissions for HAPs.

2.5 Operational Limits

a. Natural gas, propane, distillate fuel oil, and vegetable oil shall be the only fuels fired in the affected primary boiler.

b. The rated heat input capacity of the affected primary boiler shall not exceed 97 mmBtu/hour.

c. The combined usage of liquid fuels in the affected primary boiler and the associated backup boiler (see Section 3.0) shall not exceed 850,000 gallons per year.

d. The Permittee shall maintain the affected primary boiler in accordance with good air pollution control practices to assure proper functioning of equipment and minimize malfunctions, including maintaining the boilers in accordance with written procedures developed for this purpose.

2.6 Emission Limits

a. i. The short-term emissions of NO_x from the affected primary boiler shall not exceed the following limits:

	Limits			
	Gaseous Fuels		Liquid Fuels	
Pollutant	Lbs/Hr	Lbs/mmBtu	Lbs/Hr	lbs/mmBtu
NO_x	7.7	0.080	16.3	0.171

ii. Short-term emissions from the affected primary boiler shall not exceed the following limits.

Pollutant	Limits Lbs/Hour
CO	14.9
VOM	0.5
PM/PM_{10}	1.4
SO_2	2.9
Individual HAP[1]	0.25
Total HAP	0.5

[1] Individual HAP refers to individual pollutants, such as formaldehyde, benzene, toluene, hexane.

b. Annual emissions from the affected primary boiler shall not exceed the following limits. These limits reflect information in the permit application.

Pollutant	Limits (Tons/Year)
NO_X	39.0
CO	65.4
VOM	2.4
PM/PM_{10}	6.3
SO_2	2.3
Individual HAP	1.2
Total HAP	2.4

c. The combined annual emissions of NO_x and PM from the affected primary boiler and affected backup boiler (see Section 3.0) shall not exceed 39.9 and 6.5 tons/year, respectively.

Note: These limits account for additional emissions of 0.9 and 0.2 tons per year of NO_x and PM, respectively from the backup boiler during periods of transition between the two boilers when both boilers would be operated simultaneously. This reflects annual usage of up to 18.2 million scf of gaseous fuel in the backup boiler during transitions.

2.7 Testing Requirements

a. The NO_x, CO, VOM, filterable PM, condensable PM, and HAP emissions of the affected primary boiler shall be measured by an independent testing service approved by the Illinois EPA, as follows, within 90 days after a written request from the Illinois EPA for such pollutants, and for firing of such fuel(s) as specified by the request.

b. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing and shall include as a minimum:

i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

ii. The specific conditions under which testing shall be performed including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the affected boiler will be tracked and recorded.

iii. The specific determinations of emissions that are intended to be made, including sampling and monitoring locations; the test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods.

c. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe the testing.

d. Three copies of the final reports for emission tests shall be forwarded to the Illinois EPA, Compliance Section within 30 days after the test results are compiled and finalized and no later than 60 days after the final day of emission testing. The final report from testing shall contain the following as a minimum:

i. A summary of results.

ii. General information.

iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

iv. Detailed description of test conditions, including:

A. Fuel consumption by type.

B. Firing rate (million Btu/hour).

C. Opacity during each test run, as determined by USEPA Method 9.

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

2.8 Recordkeeping Requirements

The Permittee shall maintain the following records for the affected primary boiler:

a. A file containing the following information:

i. The rated heat input capacity of the boiler, mmBtu/hour, with supporting documentation.

ii. Representative data for the heat content (Btu/scf or Btu/gallon) and sulfur and ash content (percent by weight) of each type of fuel fired in the boiler.

iii. Information demonstrating that the boiler is not an affected facility for purposes of the NSPS, 40 CFR 60 Subpart Dc, including documentation for the date of manufacture and original installation and records for repairs made to the boiler, including description, date and cost.

b. An operating log or other records for the boiler that, at a minimum, shall include the following information:

i. Information for each startup and shutdown, including date, time and duration.

ii. Information for any incident in which the operation of the boiler continued during malfunction or breakdown, which records shall include date, time, and duration; a description of the incident; whether emissions exceeded or may have exceeded any applicable standard; a description of the corrective actions taken to reduce emissions and the duration of the incident; and a description of the preventative actions taken.

c. An inspection, maintenance, and repair log with dates and the nature of such activities for the affected primary boiler.

d. The following records for the affected primary boiler:

i. Natural gas usage (scf/month and scf/year).

ii. Usage of secondary fuels by type (scf or gallons/month and scf or gallons/year).

e. Records of the monthly and annual emissions of NO_x, CO, PM/PM_{10} (filterable only), VOM, SO_2, and HAPs from the boiler (tons/month and tons/year), with supporting data or calculations.

Unit-Specific Conditions for the Backup Boiler (Affected Backup Boiler)

3.1 Description

A new backup boiler will be installed at the source to provide steam when the primary boiler is not available or cannot meet the steam needs of the source. This boiler is replacing an existing backup boiler at the source. This boiler will burn natural gas as primary fuel and propane, distillate oil (including biodiesel) and vegetable oil mix as secondary fuels.

3.2 List of Emission Units

Emission Unit	Description	Emission Control
Backup Boiler	Gas and liquid fuel-fired boiler 27.9 mmBtu/hour rated heat input capacity manufactured by Clayton in 2006	Low-NO_x Burners

3.3 Applicability Provisions and Emission Standards

a. The "affected backup boiler" for the purpose of these unit-specific conditions is the boiler described in Conditions 3.1 and 3.2.

b. i. The affected backup boiler is an affected facility under the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. As an affected facility, the Permittee must comply with applicable requirements of the NSPS, 40 CFR 60 Subpart Dc, and related requirements of 40 CFR 60, Subpart A, General Provisions, for the boiler. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

ii. Pursuant to the NSPS, 40 CFR 60.42c(d), the sulfur content of the fuel oil burned in the affected boiler shall be less than 0.5 percent by weight.

iii. Pursuant to the NSPS, 40 CFR 60.11(d), at all times the Permittee shall, to the extent practicable, maintain and operate the affected backup boiler in a manner consistent with good air pollution control practices for minimizing emissions.

c. Pursuant to 35 IAC, Chapter B, Subchapter c, emissions from the affected backup boiler shall not exceed the following standards, which apply on an hourly basis:

Pollutant	Standard	Limit
PM	35 IAC 212.206	0.10 lb/mmBtu*
SO_2	35 IAC 214.122(b)(2)	0.3 lb/mmBtu*
CO	35 IAC 216.121	200 ppm, @ 50% excess air

* Limit is applicable to emissions attributable to burning of liquid fuel.

d. Pursuant to 35 IAC 212.123(a), the opacity of the exhaust from the affected backup boiler shall not exceed 30 percent, except as provided in 35 IAC 212.123(b).

3.4 Non-applicability Provisions

a. This permit is issued based on the affected backup boiler not being subject to a case-by-case determination of Maximum Achievable Control technology (MACT) pursuant to Section 112(g) of the Clean Air Act because the source, including the affected backup boiler, will not be a major source of emissions for HAPs.

b. i. This permit is issued based on the Permittee using fuel supplier certifications, as described under 40 CFR 60.48c(f)(1), to demonstrate compliance with 40 CFR 60.42c(d) (Condition 3.3(b)(ii)) for sulfur content of fuel, rather than continuous emissions monitoring for SO_2, as allowed by the NSPS, 40 CFR 60.46c(e).

ii. This permit is issued based on the affected backup boiler not being subject to 40 CFR 60.43c(c) (the opacity standard of the NSPS) because heat input capacity of the boiler is less than 30 mmBtu/hr, as provided by 40 CFR 60.47c(c).

3.5 Operational Restrictions

a. Natural gas, propane, distillate fuel oil, and vegetable oil shall be the only fuels fired in the affected backup boiler.

b. The heat input of the affected backup boiler shall not exceed 28 mmBtu/hour.

c. i. The Permittee shall not operate the affected backup boiler and the affected primary boiler simultaneously except for periods of transition between the two boilers.

ii. The transition of the affected boilers shall be conducted while firing gaseous fuels in both boilers.

iii. The usage of gaseous fuel in the affected backup boiler during periods of transition shall not exceed 18.2 million scf.

d. The Permittee shall maintain the affected backup boiler in accordance with good air pollution control practices to assure proper functioning of equipment and minimize malfunctions, including maintaining the boilers in accordance with written procedures developed for this purpose.

3.6 Emission Limits

a. i. The short-term emissions of NO_x from the affected backup boiler shall not exceed the following limits:

Pollutant	Limits			
	Gaseous Fuels		Liquid Fuels	
	Lbs/Hr	Lbs/mmBtu	Lbs/Hr	Lbs/mmBtu
NO_x	2.7	0.097	4.0	0.144

ii. Short-term emissions from the affected backup boiler shall not exceed the following limits.

Pollutant	Limits Lbs/Hour
CO	2.3
VOM	0.2
PM/PM_{10}	0.7
SO_2	0.9
Individual HAP[1]	0.1
Total HAP	0.2

[1] Individual HAP refers to individual pollutants, such as formaldehyde, benzene, toluene, hexane.

b. Annual emissions from the affected backup boiler shall not exceed the following limits.

Pollutant	Limits (ton/yr)
NO_x	17.5
CO	10.1
VOM	0.9
PM/PM_{10}	3.1
SO_2	1.9
Individual HAP	0.4
Total HAP	0.9

Note: NO_x emissions of operation of the affected backup boiler and the affected primary boiler, combined, are limited to 39.9 tons per year by Condition 2.6(c).

3.7 Testing Requirements

a. The NO_x CO, VOM, filterable PM, condensable PM, and HAP emissions of the affected backup boiler shall be measured by an independent testing service approved by the Illinois EPA, in accordance with Conditions 2.7(b), (c) and (d), within 90 days after a written request from the Illinois EPA for such pollutants, and for firing of such fuel(s) as specified by the request.

3.8 Recordkeeping Requirements

The Permittee shall maintain the following records for the affected backup boiler:

a. A file containing the following information:

i. The rated heat input capacity of the boiler, mmBtu/hour, with supporting documentation.

ii. Representative data for the heat content (Btu/scf or Btu/gallon) and sulfur and ash content (percent by weight) of each type of fuel fired in the boiler.

b. An operating log or other records for the boiler that, at a minimum, shall include the following information:

i. Information for each startup and shutdown, including date, time and duration, as required by 40 CFR 60.7(b).

ii. Information for any incident in which the operation of the boiler continued during malfunction or breakdown as addressed by 40 CFR 60.7(b), which records shall include date, time, and duration; a description of the incident; whether emissions exceeded or may have exceeded any applicable standard; a description of the corrective actions taken to reduce emissions and the duration of the incident; and a description of the preventative actions taken.

c. An inspection, maintenance, and repair log with dates and the nature of such activities for the boiler.

d. The following records for the boiler:

i. Records of fuel oil supplier certification used to demonstrate compliance with 40 CFR 60.42c(d), including the information described under 40 CFR 60.48c(f)(1).

ii. Amount of each fuel combusted (scf or gallons/month and scf or gallons/year), pursuant to 40 CFR 60.48c(g).

iii. Amount of fuel combusted in the affected backup boiler during periods of transition between the two boilers (scf/month and scf/year).

e. Records of the monthly and annual emissions of NO_x, CO, PM/PM_{10} (filterable only), VOM, SO_2, and HAPs from the boiler (tons/month and tons/year), with supporting data or calculations.

3.9 Reporting Requirements

a. The Permittee shall furnish the Illinois EPA with written notification as follows with respect to commencement of construction and operation of the affected backup boiler at the Permittee's Danville facility:

i. The date construction of the boiler commenced postmarked no later than 30 days after such date, pursuant to 40 CFR 60.7(a)(1).

ii. The actual date of initial startup of the boiler, postmarked within 15 days after such date, pursuant to 40 CFR 60.7(a)(3) and 60.48c(a), which shall be accompanied by (1) The design heat input capacity of the boiler and identification of the fuels to be combusted in the boiler, pursuant to 40 CFR 60.48c(a)(1); and (2) The annual capacity factor at which the Permittee anticipates operating the boiler based on fuel fired, pursuant to 40 CFR 60.48c(a)(3).

Unit-Specific Conditions for Rail Loadout #1 (Affected Rail Loadout)

4.1 Description

Existing Rail Loadout #1 (the affected rail loadout) will be used to handle grain and hominy (grits) from the dry corn mill. This change in operation of the affected rail loadout, which formerly handled soybean meal, is a consequence of the shutdown of the soybean extraction operations. The particulate emissions of the affected rail loadout will continue to be controlled by the existing dust capture system and baghouse (376RF12).

As the affected rail loadout would now handle grain, it will be subject to New Source Performance Standards (NSPS) for Grain Elevators, 40 CFR 60, Subpart DD, when grain is being handled.

4.2 List of Emission Units

Emission Unit	Description	Emissions Control
Rail Loadout #1	Existing rail loadout for grain and hominy (product from the dry corn mill)	Dust capture system and baghouse

4.3 Applicability Provisions and Emission Standards

a. The "affected rail loadout" for the purpose of these unit-specific conditions is the loadout operation described in Conditions 4.1 and 4.2.

b. i. The affected rail loadout is an affected facility under the federal NSPS for Grain Elevators, 40 CFR 60, Subpart DD. As an affected facility, the Permittee must comply with

applicable requirements of the NSPS, 40 CFR 60 Subpart DD, and related requirements of 40 CFR 60, Subpart A, General Provisions, for the affected rail loadout. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

ii. Pursuant to 60.302(b), on and after the 60th day of achieving the maximum production rate at which the affected rail load out will be operated with grain, but no later than 180 days after initial startup with grain, the Permittee shall not cause to be discharged into the atmosphere from the affected rail loadout any process emission which:

A. Contains particulate matter (PM) in excess of 0.01 gr/dscf.

B. Exhibits greater than 0 percent opacity.

iii. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected rail loadout will be operated with grain, but no later than 180 days after initial startup with grain, the Permittee shall not cause to be discharged into the atmosphere any fugitive emission from:

A. The affected rail loadout which exhibits greater than 5 percent opacity.

B. The grain handling operations associated with the affected rail loadout which exhibits greater than 0 percent opacity.

iv. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the affected rail loadout including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

v. If handling of grain by the affected rail loadout is permanently discontinued, the affected rail loadout will no longer be subject to the NSPS and the above requirements of the NSPS will cease to apply.

c. The affected rail loadout is subject to 35 IAC 212.123(a), which provides that the opacity of the exhaust from any emission units shall not exceed 30 percent, except as provided in 35 IAC 212.123(b).

d. The affected rail loadout is subject to 35 IAC 212.301, which provides that no person shall cause or allow the emission of

fugitive PM from any process, including any material handling or storage activity that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source, except as provided in 35 IAC 212.314.

e. i. The affected rail loadout while handling grain is subject to 35 IAC 212.462(d), which provides that emissions of PM from loadout of grain shall be controlled by use of socks, choke loading or other equivalent method. As the Permittee controls PM emissions with an equivalent method, i.e., enclosed loadout with aspiration to a baghouse, that method is further addressed in Condition 4.5.

ii. While handling materials other than grain, the affected rail loadout is subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of PM into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar new process emission units, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c).

f. The affected rail loadout is subject to 35 IAC 212.461(b), which provides that the Permittee shall implement certain housekeeping practices for the affected rail loadout as specified in 35 IAC 212.461(b)(1) through (6), including a daily check of the associated control system, regular cleaning to collect dust and spilled grain and use of a housekeeping check list. If handling of grain by the affected rail loadout is permanently discontinued, the affected rail loadout will no longer be subject to this rule and these requirements will cease to apply.

4.4 Non-Applicability Provisions

a. This permit is issued based on the affected rail loadout no longer being subject to 35 IAC 212.461(a) or 35 IAC 212.462(d), if handling of grain is permanently discontinued. This is because these rules only apply to handling of grain. Grain, as defined by 35 IAC 211.2650, means the whole kernel or seed of corn, soybeans, and any other cereal or oilseed plant and the normal fines, dust and foreign matter, which result from harvesting, handling, drying or conditioning, that has not been altered by grinding or processing.

4.5 Control Requirements

a. The PM emissions of the affected rail loadout shall be controlled by enclosure of the loading spouts above the railcar with an aspiration hood with the hood vented to a baghouse with an air flow capacity of at least 30,000 scfm, so as to maintain compliance with the opacity standards of the NSPS for railcar

loading stations, i.e., 0 percent opacity for stack emissions and no more than 5 percent opacity for fugitive emissions.

b. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the affected rail loadout including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

4.6 Testing Requirements

a. Pursuant to 40 CFR 60.8, 60.302(b) and 60.303, no later than the 60th day of achieving the maximum production rate at which the affected rail load out will be operated with grain, but no later than 180 days after initial startup with grain, the Permittee shall have a performance test conducted for the affected rail loadout while handling grain in accordance with applicable testing requirements for such testing.

4.7 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected rail loadout:

a. A file containing following information for the baghouse:

i. Design data including inlet flow rate (scfm), air to cloth ratio (feet/minute) and exhaust gas dust loading (gr/scf).

ii. Baghouse supplier recommendations for operation and maintenance of the equipment.

b. Amounts of material handled, by type (tons/month and tons /year).

c. An operating log or other records for the affected rail loadout that, at a minimum, shall include the following information:

i. Information generally confirming proper operation of the affected rail loadout for control of emissions.

ii. Information for any incident in which the operation of the rail loadout continued during s malfunction or breakdown of the control system, which records shall include date, time, and duration; a description of the incident; whether emissions exceeded or may have exceeded any applicable standard; a description of the corrective actions taken to reduce emissions and the duration of the incident; and a description of the preventative actions taken.

d. Records addressing inspection and maintenance of the control system:

i. Records for periodic inspection of the control system with date, individual performing the inspection, and nature of inspection.

ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

e. Records of the emissions of PM, PM_{10}, and $PM_{2.5}$ (tons/month and tons/year), with supporting calculations.

4.7 Reporting Requirements

a. If the increase in the annual emissions from the affected rail loadout with this project, comparing past actual emissions before the project and actual emissions after this project, is 18.5 or more tons/year of PM, 5.78 tons or more of $PM_{2.5}$, (or 8.94 or more tons of PM_{10}), in addition to submitting a deviation notification in accordance with Condition 1.5(a), the Permittee shall also fulfill the applicable reporting requirements of 40 CFR 52.21(r)(6).

Please note that this permit does not address the federal National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers, 40 CFR 63, Subparts DDDDD and JJJJJJ, which were only proposed at the time this permit was issued. For the affected boilers, when these NESHAP are adopted by USEPA and become effective, the Permittee will have to comply in a timely manner with the requirements of these NESHAP that apply for the affected boilers.

If you have any questions on this permit, please contact Manish Patel at 217/782-2113.

Edwin C. Bakowski, P.E. Date Signed: _____
Manager, Permit Section
Division of Air Pollution Control

ECB:MNP:psj

cc: Illinois EPA, FOS - Region 3
CAAPP Permit File -96020027, Illinois EPA

Attachment 1

Increases in Particulate Matter Emissions with the Project (tons/year)

	PM	PM_{10}	$PM_{2.5}$
Primary and Backup Boilers Potential Emissions	**6.5**	**6.5**	**3.7**
Rail Loadout #1:			
Past Emissions	*3.3*	*3.3*	*0.40*
Future Projected Emissions	*20.1*	*2.86*	*0.92*
Increase (Difference)	**16.8**	**-0.44**	**0.52**
Overall Project Increase	**23.3**	**6.06**	**4.22**
Significant Emission Rate	**25**	**15**	**10**
Project Significant?	No	No	No
Increase More than 50 Percent of Significant Emission Rate?	Yes	No	No

MNP:psj

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
1021 N. Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
217/782-2113

Project Summary
For a Construction Permit Application
From Bunge North America, Inc.
For New Boilers and Alternative Service for Rail Loadout
For its Danville Facility

Site Identification No.: 183020ABT
Application No.: 10050056
Date Received: May 27, 2010

Schedule
Public Comment Period Begins: October 23, 2010
Public Comment Period Closes: November 22, 2010

Illinois EPA Contacts
Permit Analyst: Manish Patel
Community Relations Coordinator: Brad Frost

I. INTRODUCTION

Bunge North America, Inc. (Bunge) has applied for a construction permit for its grain processing facility in Danville to address changes in the operations at the plant. The application addresses installation of two boilers to replace two boilers at the plant that are too big for current needs. The application also addresses use of existing Rail Loadout #1 for handling hominy and grain, rather than soybean meal. These changes require a construction permit from the Illinois EPA because they would involve emissions units at the plant.

II. PROJECT DESCRIPTION

Bunge currently processes corn at its Danville plant by dry milling to produce various products including corn meal, corn flour, and grits or hominy. It previously also operated facilities at the plant, which were recently shut down, to extract vegetable oil from soybeans and corn germ. Bunge also operates its grain handling facility for the receipt, storage and loadout of grain and oil seeds.

Bunge is proposing to install two boilers to replace the existing coal-fired boiler and an existing backup boiler at the plant. The existing boilers, which are much larger than the new boilers, are no longer practical to operate as Bunge has shut down the corn and soybean oil extraction operations at the plant. This has resulted in substantial reductions in the plant's steam and electricity needs, as well as the plant's emissions.

The new boilers will fire natural gas as their primary fuel and propane, distillate fuel oil, and vegetable oil as secondary fuels. The two boilers will not be operated simultaneously except during periods of transition between the boilers. These boilers will be relocated from other facilities owned by Bunge.

The principal air contaminants emitted from the proposed boilers would be nitrogen oxide (NO_x), carbon monoxide (CO), and sulfur dioxide (SO_2). NO_x is formed thermally by combination of oxygen and nitrogen in the air at the temperatures at which fuel is burned in a boiler. Factors affecting NO_x formation from a boiler include boiler design, boiler load, and fuel type. The NO_x emissions from the proposed boilers will be controlled with low-NO_x burners. Low-NO_x combustors lower NO_x formation by controlling flame turbulence and staging the mixing of fuel and combustion air. CO is formed by the incomplete combustion of fuel. CO is associated with most combustion processes and is found in measurable amounts in boiler exhaust. CO emissions are controlled by providing adequate fuel residence time and high temperature in combustion zone to ensure complete combustion. SO_2 emissions, which would be associated mainly with use of liquid fuel, are addressed by the low sulfur content of the fuel.

Bunge is also proposing to use existing rail loadout #1 to handle grain and hominy (grits) from the dry corn mill. This change in operation of the rail loadout, which formerly handled soybean meal, is a consequence

of the shutdown of the soybean extraction operations. The rail loadout operation is a source of particulate emissions, which will continue to be controlled by the existing dust capture system and a fabric filter or baghouse.

III. PROJECT EMISSIONS

The potential annual emissions from the new boilers, based on the draft permit, would be 39.9 tons of NO_x, 65.4 tons of CO, 6.5 tons of PM, 2.4 tons of VOM and 2.3 tons of SO_2. Actual annual emissions of the boiler would be less than these limits to the extent that the primary boiler does not operate at its capacity and both boilers generally would not be operated simultaneously. Overall, there would be a decrease in actual emissions of the plant if one were to also consider the reductions in emissions from shutting down the existing boilers.[1]

The change in service of the Rail Loadout #1 will also not be accompanied by a significant increase in particulate matter emissions. (See Attachment 1 of the draft permit.) As with the boilers, there would be an overall decrease in actual emissions of particulate matter from the plant if one were to also consider the reductions in emissions from shutting down the corn oil and soybean oil extraction plants.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois. The proposed boilers will readily comply with the applicable state standards (35 Ill. Adm. Code: Subtitle B).

The backup boiler is also subject to the federal New Source Performance Standards (NSPS), 40 CFR 60 Subpart Dc, for Small Industrial-Commercial-Institutional Steam Generating Units. This standard addresses SO_2 emission from the boiler while firing liquid fuel by limiting it to 0.5 lb/mmBtu or burning fuel oil that has maximum sulfur content of 0.5 percent by weight.

As the rail loadout would now handle grain, it will be subject to New Source Performance Standards (NSPS) for Grain Elevators, 40 CFR 60, Subpart DD, when grain is being handled. This standard addresses particulate matter (PM) emissions from the rail loadout process to be less than 0.01 gr/dscf and opacity to be 0 percent. The NSPS also addresses opacity of the fugitive emissions of the rail loadout and associated grain handling operations to be no more than 5 percent and 0 percent, respectively.

---

1 In its application, Bunge indicates that the typical annual emissions of the two existing boilers, one of which was fired with coal, have been approximately 100 tons of NO_x, 80 tons of CO and 640 tons of SO_2.

The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement. The project should readily comply with the applicable standards.

V. APPLICABLE OF PREVENTION OF SIGNIFICANT DETERIORATION RULES

This project is not considered a major project under the federal rules for Prevention of Significant Deterioration of Air Quality (PSD), 40 CFR 52.21. This is because the potential emissions from the proposed boilers, as addressed by the permit, and the increase in emissions from the rail loadout #1, would be less than significant. In particular, the emission increase thresholds for PSD, i.e., NO_x, SO_2 and VOM are limited to less than 40 tons/year; CO emissions are limited to less than 100 tons/year and $PM/PM_{10}/PM_{2.5}$ emissions are limited to less than 25/15/10 tons/year.

VI. DRAFT PERMIT

The conditions of the draft permit for the project contain limitations and requirements for the boilers and rail loadout #1 to help assure that the project complies with applicable regulatory requirements.

The draft permit includes enforceable limits on emissions and operation for the boilers and the rail loadout to assure that project remains below the levels at which it would be considered major for PSD. In addition to limiting annual emissions, the permit also includes limits on short term emissions, limitation on the capacity of the boilers and usage restrictions on liquid fuels for the boilers. The permit also generally requires that good air pollution control practice be used to minimize emissions.

The permit also establishes appropriate compliance procedures for the boilers and the rail loadout, including requirements for emission testing, monitoring, recordkeeping, and reporting. These measures are being imposed to assure that the emissions of the boilers and the rail loadout are accurately tracked to confirm compliance with the applicable short-term standards and annual emission limits.

VII. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that Bunge's application meets applicable state and federal requirements. The Illinois EPA is therefore proposing to issue a permit for the proposed project.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions of the draft permit.

MNP:10050056:psj

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
321 East North Street
Danville, Illinois 61832

Application No.: 11010018 I.D. No.: 183020ABT
Applicant's Designation: Date Received: January 13, 2011
Subject: 4-Grit Aspirated Gravity Tables
Date Issued: March 22, 2011
Location: 321 East North Street, Danville, Vermillion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of aspirated gravity tables as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit authorizes the installation of three additional gravity tables, each controlled by a new baghouse, (FORS VAC GRAV SEP #3, 4 and 5) in the dry corn milling plant (the affected mill). The Permittee plans to use these additional gravity tables to improve the quality and yield of the affected mill.

2. This permit does not revise or relax any requirements for the affected mill, including applicable emission standards and associated requirements for monitoring, recordkeeping and reporting, which shall continue to apply after these changes.

3. This permit does not authorize an increase in the production or capacity of the affected mill as a result of these changes.

4. This permit is issued based on negligible emissions from the gravity tables. For this purpose, PM/PM_{10} emissions from each gravity table shall not exceed 0.1 lbs/hour and 0.44 tons/year.

5. At all times, the Permittee shall maintain and operate the new gravity tables, including associated control devices, in a manner consistent with good air pollution control practice for minimizing emissions.

6. The Permittee may operate the gravity tables authorized by this construction permit under this permit until its CAAPP permit is reissued to address this equipment.

If you have any questions on this, please call Kevin Hecht at 217/782-2113.

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:KTH:jws

cc: Region 3

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
321 East North Street
Danville, Illinois 61832

Application No.: 11050002 I.D. No.: 183020ABT
Applicant's Designation: Date Received: May 2, 2011
Subject: Bran Flour Yield Improvement
Date Issued: August 1, 2011
Location: 321 East North Street, Danville, Vermillion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a bran flour improvement project, including new milling, sifting, and drying equipment venting to existing baghouses as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit authorizes a bran flour improvement project in the dry corn mill (the affected mill), with the installation of assorted equipment including Bran Dryer Process 4880-0042-0057, Bran Sifter Process 4880-0042-0062, Bran Bin 4880-0042-0054 and Camas/Bran 4880-0034-0077, each controlled by an existing baghouse. The Permittee plans to use this additional equipment to improve the quality and yield of the affected mill.

2. This permit does not revise or relax any requirements for the affected mill, including applicable emission standards and associated requirements for monitoring, recordkeeping and reporting, which shall continue to apply after these changes.

3. This permit does not authorize an increase in the capacity of the affected mill as a result of these changes.

4a. This permit is issued based on negligible emissions from the Bran Dryer Process 4880-0042-0057, Bran Sifter Process 4880-0042-0062, and Bran Bin 4880-0042-0054. For this purpose, PM/PM_{10} emissions from each of these units shall not exceed 0.1 lbs/hour and 0.44 tons/year.

b. This permit is issued based on minimal emissions from the Camas/Bran 4880-0034-0077. For this purpose, PM/PM_{10} emissions shall not exceed 0.25 lbs/hour and 1.1 tons/year.

5. At all times, the Permittee shall maintain and operate the new additional equipment, including associated control devices, in a manner consistent with good air pollution control practice for minimizing emissions.

6. The Permittee may operate the additional equipment authorized by this construction permit under this permit until its CAAPP permit is reissued to address this equipment.

If you have any questions on this, please call Kevin Hecht at 217/782-2113.

Edwin C. Bakowski, P.E. Date Signed: _____
Manager, Permit Section
Division of Air Pollution Control

ECB:KTH:psj

cc: Region 3

R001021

BUNGE

Enhancing the Value of America's Harvest[SM]

183020ABT
96020027

January 10, 2011

LeeAnne Kinsella
Permit Section, CAAPP Group
Illinois Environmental Protection Agency
Division of Air Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62702

Bunge North America, Inc. (Bunge)
321 E. North Street, Danville
ID No. 183020ABT
CAAPP Permit
Significant Title V Permit Modification Application

Dear Ms. Kinsella:

Please find enclosed two copies of an application package for a significant modification to the CAAPP permit for our Bunge – Danville, Illinois facility. The facility currently has an operating permit Application No. 96020027.

The enclosed application is submitted to add to the facility Corn Mill a 4-Grit Aspirated Gravity Table System and its associated emissions

If you have any questions about this permit application package, please do not hesitate to contact Bob Henricks at (314) 292-2342, email robert.henricks@bunge.com.

Sincerely,
Bunge North America, Inc.

Dean Hughes
Eastern Regional Manager - Milling

Enclosure: Application original and 1 copy

p.c.: Aric Silver, corp. file

RECEIVED
JAN 12 2011
Illinois Environmental Protection Agency
BUREAU OF AIR
STATE OF ILLINOIS

Description of Application

The Bunge North America, Inc. - Danville facility proposes to improve its corn mill by adding a 4-Grit Aspirated Gravity Table System. The system will increase the permitted particulate emissions nominally.

A spreadsheet is enclosed documenting potential emissions of the plant.

A subsequent request for minor modification will be submitted in approximately 4 months when the replacement package boilers for the B&W Type FM boiler are operational. Soon thereafter, a request to replace the Title V permit with a FESOP will be submitted.

Table of Contents

The following completed forms and supplemental information is submitted:

ITEM	NAME	PAGE(S)
200CAAPP	Application for CAAPP Permit	1-4GO – 5-4GO
271CAAPP	Application for Modification to a CAAPP Permit	6-4GO – 7-4GO
292CAAPP	Fee Determination for CAAPP Source	8-4GO – 9-4GO
505CAAPP	Supplement to CAAPP Application	10-4GO – 11-4GO
	Emission Calculation Sheets	12-4GO – 24-4GO

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL – PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: FESOP
Date: ____ / ____ / ____
Page ____ of ____
Source Designation: ____

APPLICATION FOR CAAPP PERMIT
(CHECK ONLY ONE)

- ☐ INITIAL APPLICATION
- ☐ RENEWAL APPLICATION
- ☒ SIGNIFICANT MODIFICATION

FOR AGENCY USE ONLY
ID NUMBER:
PERMIT #:
DATE:

SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.
2) DATE FORM COMPLETED: 11/08/10
3) SOURCE STREET ADDRESS: 321 E. North Street
4) CITY: Danville
5) ZIP: 61832
6) IS THE SOURCE LOCATED WITHIN CITY LIMITS? ☒ YES ☐ NO
7) TOWNSHIP NAME: Danville
8) COUNTY: Vermillion
9) TYPICAL NO. OF EMPLOYEES AT THE SOURCE:
10) ILLINOIS AIR POLLUTION SOURCE ID NO. (IF KNOWN): 183020ABT
11) FEDERAL EMPLOYER IDENTIFICATION NO. (FEIN): 37-0614689
12) TYPE OF SOURCE AND PRODUCTS PRODUCED: Dry Corn Mill & Merchandizing Grain Elevator
13) PRIMARY STANDARD INDUSTRIAL CLASSIFICATION (SIC) CATEGORY: Flour & Other Grain Mill Products
14) PRIMARY SIC NO.: 2041 (NAICS #: 311211)
15a) LATITUDE (DD:MM:SS): 40.1257 N
b) LONGITUDE (DD:MM:SS): 87.6236 W
16a) UTM ZONE:
b) UTM VERTICAL (KM):
c) UTM HORIZONTAL (KM):
17a) COORDINATE METHOD: EARTHTOOLS
b) REFERENCE LOCATION: GATE ON LAUHOFF ST
c) COORDINATE ACCURACY: 1 second
18) SOURCE ENVIRONMENTAL CONTACT PERSON: Aric Silver
19) CONTACT PERSON'S TELEPHONE NO.: (217) 443-9784

RECEIVED
JAN 12 2011
Illinois Environmental Protection Agency
BUREAU OF AIR
STATE OF ILLINOIS

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE

APPLICATION PAGE 1-4GO

OWNER INFORMATION

20) NAME: Bunge North America, Inc.

21) ADDRESS: 11720 Borman Drive

22) CITY:	23) STATE:	24) ZIP:
St. Louis	MO	63146-1000

25) OWNER'S AGENT (IF APPLICABLE): NA

OPERATOR INFORMATION

26) NAME: BUNGE MILLING, INC.

27) ADDRESS: 321 E. North Street

28) CITY:	29) STATE:	30) ZIP:
DANVILLE	ILLINOIS	61832

BILLING INFORMATION

31) NAME: Bunge North America, Inc.

32) ADDRESS: 321 E. North Street

33) CITY:	34) STATE:	35) ZIP:
Danville	IL	61832

36) CONTACT PERSON:	37) CONTACT PERSON'S TELEPHONE NO.:
Dean Hughes	217-442-9782

APPLICANT INFORMATION

38) WHO IS THE PERMIT APPLICANT? (CHECK ONE): ☒ OWNER ☐ OPERATOR

39) ALL CORRESPONDENCE TO: (CHECK ONE) ☐ OWNER ☐ OPERATOR ☒ SOURCE

40) ATTENTION NAME AND/OR TITLE FOR WRITTEN CORRESPONDENCE: Dean Hughes, Eastern Regional Manager - Milling

41) TECHNICAL CONTACT PERSON FOR APPLICATION:	42) CONTACT PERSON'S TELEPHONE NO.:
Robert Henricks 314-292-2342	217-442-9782

SUMMARY OF APPLICATION CONTENTS

NOTE: ITEMS 43 TO 62 WILL BE USED FOR APPLICATION COMPLETENESS DETERMINATION.

43) DOES THE APPLICATION INCLUDE A TABLE OF CONTENTS?	☒ YES ☐ NO
44) DOES THE APPLICATION INCLUDE A LIST OF ALL ITEMS AND ACTIVITIES FOR WHICH A PERMIT IS BEING SOUGHT?	☒ YES ☐ NO
45) DOES THE APPLICATION INCLUDE A PLOT PLAN AND/OR MAP DEPICTING THE AREA WITHIN ONE-QUARTER MILE OF THE SOURCE?	☒ YES ☐ NO
46) DOES THE APPLICATION INCLUDE A PROCESS FLOW DIAGRAM(S) SHOWING ALL EMISSION UNITS AND CONTROL EQUIPMENT, AND THEIR RELATIONSHIP?	☒ YES ☐ NO
47) DOES THE APPLICATION INCLUDE A COMPLETE PROCESS DESCRIPTION FOR THE SOURCE?	☒ YES ☐ NO
48a) DOES THE APPLICATION INCLUDE THE APPROPRIATE, COMPLETED FORMS FOR ALL INDIVIDUAL EMSSION UNITS AND AIR POLLUTION CONTROL EQUIPMENT, LISTING ALL APPLICABLE REQUIREMENTS AND PROPOSED EXEMPTIONS FROM OTHERWISE APPLICABLE REQUIREMENTS?	☒ YES ☐ NO
b) DOES THE APPLICATION ADDRESS OTHER MODES OF OPERATION FOR WHICH A PERMIT IS BEING SOUGHT?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
c) DOES THE APPLICATION INCLUDE ALL REASONABLY ANTICIPATED OPERATING SCENARIOS FOR WHICH A PERMIT IS BEING SOUGHT?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
49) DOES THE APPLICATION INCLUDE A COMPLETED "FUGITIVE EMISSION" FORM 391-CAAPP?	☐ YES ☒ NO
50) DOES THE APPLICATION INCLUDE A COMPLETED "FEE DETERMINATION FOR CAAPP PERMIT" FORM 292-CAAPP? (NOTE: ANNUAL FEES WILL BE BASED UPON INFORMATION CONTAINED IN THIS FORM.)	☐ YES ☒ NO
51) DOES THE APPLICATION INCLUDE A COMPLETED "HAZARDOUS AIR POLLUTANT EMISSION SUMMARY" FORM 215-CAAPP?	☐ YES ☒ NO
52) DOES THE APPLICATION INCLUDE THE CALCULATIONS ON WHICH THE FOLLOWING, TO THE EXTENT THEY ARE RELATED TO AIR EMISSIONS, WERE BASED: • POLLUTANT EMISSION RATES, • FUELS AND RAW MATERIALS USAGE, AND • CONTROL EQUIPMENT EFFICIENCY?	☒ YES ☐ NO
53) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT" FORM 293-CAAPP?	☐ YES ☒ NO
54) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE CERTIFICATION" FORM 296-CAAPP?	☐ YES ☒ NO
55) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE-ADDENDUM FOR NONCOMPLYING EMISSION UNITS" FORM 294-CAAPP FOR ONE OR MORE NONCOMPLIANT EMISSION UNITS FOR WHICH ISSUANCE OF A CAAPP PERMIT IS REQUESTED?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE

56)	HAS THE APPLICANT RETAINED A COPY OF THIS APPLICATION AT THE SOURCE? (NOTE: IF TRADE SECRET INFORMATION IS NOT BEING SUBMITTED, THEN ONLY THE ORIGINAL APPLICATION NEED BE INITIALLY SUBMITTED, HOWEVER, THE ILLINOIS EPA MAY REQUEST UP TO 4 COPIES OF THE FINAL APPLICATION PRIOR TO PUBLIC NOTICE.)	☒ YES ☐ NO
57a)	DOES THE APPLICATION CONTAIN TRADE SECRET INFORMATION?	☐ YES ☒ NO
b)	IF YES, HAS SUCH INFORMATION BEEN PROPERLY MARKED AND CLAIMED, AND TWO SEPARATE COPIES OF THE APPLICATION SUITABLE FOR PUBLIC INSPECTION BEEN SUBMITTED, IN ACCORDANCE WITH APPLICABLE REGULATIONS?	☐ YES ☐ NO
58)	DOES THE APPLICATION INCLUDE AN EARLY REDUCTION DEMONSTRATION FOR HAZARDOUS AIR POLLUTANTS (HAP) PURSUANT TO SECTION 112(i)(5) OF THE CLEAN AIR ACT AS AMENDED IN 1990?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
59)	DOES THE APPLICATION INCLUDE A PROPOSED DETERMINATION OF MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT) FOR HAZARDOUS AIR POLLUTANTS PURSUANT TO SECTION 112 OF THE CLEAN AIR ACT AS AMENDED IN 1990?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
60)	HAS THE APPLICANT REGISTERED A RISK MANAGEMENT PROGRAM FOR ACCIDENTAL RELEASES PURSUANT TO SECTION 112(r) OF THE CLEAN AIR ACT AS AMENDED IN 1990 OR INTENDS TO COMPLY WITH THIS REQUIREMENT IN ACCORDANCE WITH ITS COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
61a)	FOR CAAPP PERMIT RENEWALS, DOES THE APPLICATION INCLUDE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
b)	FOR SIGNIFICANT MODIFICATIONS AND INITIAL CAAPP APPLICATIONS SUBMITTED AFTER APRIL 20, 1998, DOES THE APPLICATION INCLUDE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64 FOR EMISSION UNITS WITH POST-CONTROL EMISSIONS GREATER THAN OR EQUAL TO THE MAJOR SOURCE THRESHOLD?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
62)	FOR SIGNIFICANT MODIFICATIONS, DOES THE APPLICATION INCLUDE A DESCRIPTION OF THE PROPOSED CHANGE(S), INCLUDING ALL PHYSICAL CHANGES IN EQUIPMENT, CHANGES IN THE METHOD OF OPERATION, CHANGES IN EMISSIONS, AND ANY NEW APPLICABLE REQUIREMENTS WHICH WILL APPLY AS A RESULT OF THE PROPOSED CHANGE?	☒ YES ☐ NO

NOTE: ANSWERING "NO" TO ANY OF THE ABOVE (ITEMS 43-62, EXCEPT ITEM 57a) MAY RESULT IN THE APPLICATION BEING DEEMED INCOMPLETE.

63)	DOES THE APPLICATION REQUEST TO UTILIZE THE OPERATIONAL FLEXIBILITY PROVISIONS AND INCLUDE THE INFORMATION REQUIRED FOR SUCH USE?	☐ YES ☒ NO
64a)	DOES THE APPLICANT HEREBY REQUEST A PERMIT SHIELD FOR THE ENTIRE SOURCE?	☐ YES ☒ NO
b)	IF NO, DOES THE APPLICATION CONTAIN A REQUEST FOR A PERMIT SHIELD FOR SPECIFIC ITEMS ONLY, IN ACCORDANCE WITH THE INSTRUCTIONS FOR A CAAPP PERMIT?	☐ YES ☒ NO
65)	DOES THE APPLICATION INCLUDE A COMPLETED "LISTING OF INSIGNIFICANT ACTIVITIES" FORM 297-CAAPP?	☐ YES ☒ NO
66)	DOES THE APPLICATION INCLUDE A DRAWING PROVIDING THE SOURCE LAYOUT? IF NO, PLEASE NOTE THAT THE ILLINOIS EPA MAY REQUEST SUCH A DRAWING UPON DETAILED REVIEW OF THE APPLICATION.	☐ YES ☒ NO

67) WHY IS THE APPLICANT APPLYING FOR A CAAPP PERMIT (CHECK ALL THAT APPLY)?

☐ THE POTENTIAL TO EMIT ONE OR MORE AIR POLLUTANTS FOR THE SOURCE IS 100 TONS/YEAR OR GREATER.

☐ THE SOURCE IS AN AFFECTED SOURCE FOR ACID RAIN DEPOSITION.

☐ THE POTENTIAL TO EMIT VOM IS 25 TONS/YEAR OR MORE AND THE SOURCE IS LOCATED IN ONE OF THE FOLLOWING CHICAGO AREA COUNTIES OR TOWNSHIPS:

- COOK COUNTY
- DUPAGE COUNTY
- KANE COUNTY
- LAKE COUNTY
- McHENRY COUNTY
- WILL COUNTY
- AUX SABLE TOWNSHIP, GRUNDY COUNTY
- GOOSE LAKE TOWNSHIP, GRUNDY COUNTY
- OSWEGO TOWNSHIP, KENDALL COUNTY

NOTE: THE U. S. EPA HAS APPROVED AN EXEMPTION ON NITROGEN OXIDES (NOx) EMISSIONS AS AN OZONE PRECURSOR IN THE CHICAGO OZONE NON-ATTAINMENT AREA. THEREFORE THE MAJOR SOURCE THRESHOLD FOR NOx EMISSIONS IS 100 TONS/YEAR UNTIL THIS EXEMPTION IS NO LONGER EFFECTIVE. SHOULD THE CURRENT NOx EXEMPTION BE NO LONGER EFFECTIVE, THE MAJOR SOURCE THRESHOLD FOR NOx EMISSIONS WILL BE 25 TONS/YEAR IN THE ABOVE CHICAGO AREA COUNTIES AND TOWNSHIPS.

☐ THE POTENTIAL TO EMIT AN INDIVIDUAL HAZARDOUS AIR POLLUTANT IS 10 TONS/YEAR OR MORE, OR THE POTENTIAL TO EMIT ALL SOURCE WIDE HAZARDOUS AIR POLLUTANTS IS 25 TONS/YEAR OR MORE, OR MEETS AN APPLICABLE LOWER THRESHOLD.

☐ THE SOURCE CONTAINS EQUIPMENT OR OPERATIONS SUBJECT TO CERTAIN USEPA EMISSION STANDARDS (NSPS AND NESHAP) FOR WHICH USEPA REQUIRES A CAAPP PERMIT.

68a) ARE ACTUAL EMISSIONS OF THE SOURCE BELOW THE APPLICABILITY LEVELS FOR A CAAPP PERMIT?	☒ YES	☐ NO
b) DOES THE APPLICATION CONTAIN PROPOSED PERMIT LIMITATIONS THAT WILL CONSTRAIN THE EMISSIONS AND PRODUCTION OR OPERATION OF THE SOURCE SUCH THAT POTENTIAL EMISSIONS OF THE SOURCE WILL FALL BELOW THE LEVELS FOR WHICH A CAAPP PERMIT IS REQUIRED?	☒ YES	☐ NO
c) DOES THE APPLICANT HEREBY REQUEST A FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CONSTRAINING THE EMISSIONS AND PRODUCTION OR OPERATION OF THE SOURCE SUCH THAT POTENTIAL EMISSIONS WOULD FALL BELOW APPLICABILITY LEVELS AND THEREBY EXCLUDE THE SOURCE FROM REQUIRING A CAAPP PERMIT?	☐ YES	☒ NO

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

69) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____
AUTHORIZED SIGNATURE

Eastern Regional Manager - Milling
TITLE OF SIGNATORY

Dean Hughes
TYPED OR PRINTED NAME OF SIGNATORY

1 / 10 / 11
DATE

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

APPLICATION FOR MODIFICATION TO A CAAPP PERMIT	***FOR AGENCY USE ONLY***
(CHECK ONLY ONE)	ID NO.:
X SIGNIFICANT MODIFICATION	PERMIT NO.:
☐ MINOR MODIFICATION	DATE:

SECTION ONE — *SOURCE INFORMATION*

1) SOURCE NAME: BUNGE NORTH AMERICA, INC

2) SOURCE ID NO.: 183020ABT

3) DATE FORM PREPARED: November 9, 2010

SECTION TWO — *INSTRUCTIONS IN BRIEF*

1) COMPLETE THE FOLLOWING FORM WHEN APPLYING FOR A SIGNIFICANT OR MINOR MODIFICATION.

2) PROVIDE COMPLETED FORMS FOR THE AGENCY TO USE TO NOTIFY USEPA AND AFFECTED STATES AS REQUIRED UNDER SUBSECTIONS 8 AND 9 OF 39.5 OF THE ENVIRONMENTAL PROTECTION ACT. (COMPLETION OF THIS FORM FULFILLS THIS REQUIREMENT.)

3) FOR A CHANGE TO A COMBINED TITLE I/CAAPP PERMIT USING THE TITLE I/TITLE V PERMIT PROCESS, A SIGNIFICANT OR MINOR MODIFICATION REQUEST THAT WILL REVISE EXISTING APPLICABLE PERMIT CONDITIONS, A *T1R REQUEST*, OR ESTABLISH NEW CONDITIONS, A *T1N REQUEST*, WILL ADDITIONALLY NEED TO INCLUDE WITH THIS REQUEST A COMPLETED "REQUEST FOR A TITLE 1 INCORPORATION INTO THE CAAPP: T1, T1 REVISED (T1R), AND/OR T1 NEW (T1N)" FORM 283-CAAPP.

4) A SIGNIFICANT MODIFICATION REQUEST WILL REQUIRE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64 FOR EMISSION UNITS WITH POST-CONTROL EMISSIONS GREATER THAN OR EQUAL TO THE MAJOR SOURCE THRESHOLD.

5) THE APPLICATION SHOULD INCLUDE A DESCRIPTION OF THE PROPOSED CHANGE(S), ANY PHYSICAL CHANGES IN EQUIPMENT, CHANGES IN THE METHOD OF OPERATION, CHANGES IN EMISSIONS, AND ANY NEW APPLICABLE REQUIREMENTS WHICH WILL APPLY AS A RESULT OF THE PROPOSED CHANGE.

6) TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE THIS FORM FOR A SIGNIFICANT MODIFICATION. TO DECREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE A 273-CAAPP "REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT".

7) REFER TO 271-CAAPP INSTRUCTIONS FOR FURTHER GUIDANCE ON COMPLETING THIS FORM.

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____
AUTHORIZED SIGNATURE

DEAN HUGHES
TYPED OR PRINTED NAME OF SIGNATORY

EASTERN REGIONAL MANAGER - MILLING
TITLE OF SIGNATORY

1 / 10 / 11
DATE

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE

APPLICATION PAGE 6-4GO

SECTION THREE	MODIFICATION INFORMATION		
	PERMIT MODIFICATION RATIONALE		
	WHY IS THE APPLICANT APPLYING FOR A MODIFICATION? (CHECK ALL THAT APPLY)	YES	NO
1)	THE APPLICANT REQUESTS TO CHANGE A CURRENT TITLE 1 LIMIT OR OTHER LIMIT.	☐	X
2)	THE APPLICANT REQUESTS TO INCORPORATE A NEW OR MODIFIED RULE.	☐	X
3)	THE APPLICANT REQUESTS TO INCORPORATE A CONSTRUCTION PERMIT.	X	☐
4)	THE APPLICANT REQUESTS TO CHANGE PERMIT REQUIRMENTS (E.G., MONITORING, RECORDKEEPING, REPORTING, ETC.).	X	☐
5)	THE APPLICANT REQUESTS TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES.	X	☐
6)	THE APPLICANT REQUESTS TO MODIFY A COMPLIANCE PROCEDURE.	☐	X
7)	OTHER (DESCRIBE):	☐	X
	FOR MINOR PERMIT MODIFICATION		
	IF REQUESTING A MINOR PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
8)	WOULD THE REQUEST VIOLATE ANY APPLICABLE REQUIREMENT?	☐	X
9)	WOULD THE REQUEST INVOLVE SIGNIFICANT CHANGES TO EXISTING MONITORING, REPORTING, OR RECORDKEEPING REQUIREMENTS IN THE PERMIT?	☐	X
10)	WOULD THE REQUEST REQUIRE A CASE-BY-CASE DETERMINATION OF AN EMISSION LIMITATION OR OTHER STANDARD, OR A SOURCE-SPECIFIC DETERMINATION OF AMBIENT IMPACTS, OR A VISIBILITY OR INCREMENT ANALYSIS?	☐	X
11)	WOULD THE REQUEST SEEK TO ESTABLISH OR CHANGE A PERMIT TERM OR CONDITION FOR WHICH THERE IS NO CORRESPONDING UNDERLYING REQUIREMENT AND WHICH AVOIDS AN APPLICABLE REQUIREMENT TO WHICH THE SOURCE WOULD OTHERWISE BE SUBJECT?	X	☐
12)	WOULD THE REQUEST BE A MODIFICATION UNDER ANY PROVISION OF TITLE I OF THE CLEAN AIR ACT?	☐	X
13)	WOULD THE REQUEST BE REQUIRED TO BE PROCESSED AS A SIGNIFICANT MODIFICATION? NOTE: PURSUANT TO 39.5(14) PERMIT MODIFICATIONS, IF THE APPLICANT ANSWERED "YES" TO ANY OF THE ABOVE QUESTIONS 8-13, THE MODIFICATION IS NOT CONSIDERED A MINOR PERMIT MODIFICATION AND WILL NEED TO BE SUBMITTED AS A SIGNIFICFANT MODIFICATION, PROCEED TO QUESTIONS 18-22.	X	☐
	DOES THE MINOR PERMIT MODIFICATION APPLICATION INCLUDE THE FOLLOWING:		
14)	A DESCRIPTION OF THE CHANGE, THE EMISSIONS RESULTING FROM THE CHANGE, AND ANY NEW APPLICABLE REQUIREMENTS THAT WILL APPLY IF THE CHANGE OCCURS?	☐	☐
15)	THE SOURCE'S SUGGESTED DRAFT PERMIT (E.G., REDLINE, TRACKED CHANGES VERSION)?	☐	☐
16)	A CERTIFICATION BY A RESPONSIBLE OFFICIAL THAT THE PROPOSED MODIFICATION MEETS THE CRITERIA FOR USE OF MINOR PERMIT MODIFICATION PROCEDURES (E.G., THE SIGNATURE AT THE TOP OF THIS FORM)?	☐	☐
17)	UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION REQUEST, WILL THE SOURCE COMPLY WITH BOTH THE APPLICABLE REQUIREMENTS GOVERNING THE CHANGE AND THE PROPOSED PERMIT TERMS AND CONDITIONS? NOTE: UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION, THE SOURCE NEED NOT COMPLY WITH THE EXISTING PERMIT TERMS AND CONDITIONS IT SEEKS TO MODIFY.	☐	☐
	FOR SIGNIFICANT PERMIT MODIFICATION		
	IF REQUESTING A SIGNIFICANT PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
18)	THE PERMIT MODIFICATION WOULD NOT QUALIFY AS EITHER MINOR PERMIT MODIFICATION OR AS ADMINISTRATIVE PERMIT AMENDMENTS?	X	☐
19)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WILL REQUIRE A SIGNIFICANT CHANGE IN EXISTING MONITORING TERMS OR CONDITIONS?	X	☐
20)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION FOR A RELAXATION OF REPORTING OR RECORDKEEPING REQUIREMENTS?	☐	X
21)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WOULD REQUIRE DECISIONS TO BE MADE ON TECHNICALLY COMPLEX ISSUES?	☐	X
22)	IF A MODIFICATION CHANGES OR EFFECTS PREVIOUSLY SUBMITTED INFORMATION (E.G., ALTERING ESTABLISHED MONITORING), DOES THIS APPLICATION INCLUDE A REVISED 200-CAAPP AND OTHER ASSOCIATED DATA OR FORMS NEEDED TO DOCUMENT THE REQUEST?	X	☐

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

FEE DETERMINATION FOR CAAPP SOURCE

FOR AGENCY USE ONLY
ID NO.:
PERMIT NO.:
DATE:

SECTION ONE — SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2) SOURCE ID NO.: 183020ABT

3) DATE FORM PREPARED: Nov. 9, 2010

SECTION TWO — INSTRUCTIONS IN BRIEF

1) COMPLETE THIS FORM TO DETERMINE THE PERMIT FEE ESTABLISHED BY THE CAAPP PERMIT.

2) THE EMISSION LEVELS STATED IN SECTION FOUR, WHICH ARE ONLY USED FOR THE PURPOSE OF PERMIT FEE DETERMINATION, WILL BECOME PERMIT SPECIAL CONDITIONS IN THE CAAPP PERMIT.

3) THE ILLINOIS EPA DOES NOT REQUIRE PAYMENT WITH THIS APPLICATION. WHEN YOU ARE BILLED MAKE CHECK OR MONEY ORDER PAYABLE TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. SEND TO THE ADDRESS AT THE TOP OF THIS FORM. **DO NOT SEND CASH**. ON THE CHECK MEMO LINE, PLEASE LIST "CAAPP OPERATING PERMIT FEE: ID NO. XXXXXXXXX", REPLACE THE Xs WITH YOUR SOURCE ID NUMBER.

SECTION THREE — FEE RATIONALE

WHAT IS THE PERMIT STATUS AT THE TIME OF THIS REQUEST? CHECK ONLY ONE BELOW.

1) ☐ INITIAL CAAPP PERMIT ☒ RENEWAL CAAPP PERMIT ☐ FESOP INITIAL/RENEWAL
☐ SIGNIFICANT MODIFICATION ☐ MINOR MODIFICATION ☐ ADMINISTRATIVE AMENDMENT

2) COMPLETE THE BELOW TABLE FOR A NON-INITIAL CAAPP PERMIT. IF THERE IS AN INCREASE/DECREASE IN EMISSIONS, ENTER THE NUMBER(S) FOR THE EMISSIONS CHANGE RATIONALE AS APPROPRIATE.

POLLUTANT	INCREASE	DECREASE	NO CHANGE	EMISSIONS CHANGE RATIONALE(S)
NITROGEN OXIDES (NO_X)	☐	☐	X	
PARTICULATE MATTER (PART)	X	☐	☐	Addition of 4-Grit process.
SULFUR DIOXIDE (SO_2)	☐	☐	X	
VOLATILE ORGANIC MATERIAL (VOM)	☐	☐	X	
OTHER (SPECIFY)	☐	☐	☐	
OTHER (SPECIFY)	☐	☐	☐	

CHANGE RATIONALE:
1 BUSINESS DECISION (E.G., OPERATING NEEDS, BANKRUPTCY, ETC.).
2 REMOVAL OR ADDITION OF PROCESSES AT THE SOURCE.
3 INCLUSION OR REMOVAL OF A CONTROL DEVICE.
4 CHEMICAL REFORMULATION (E.G., REFORMULATING A COATING FROM HIGH VOM TO A LOW VOM).
5 FUEL SWITCHING (E.G., COAL TO NATURAL GAS, ETC.).
6 METHODOLOGY CHANGE (E.G., SWITCHING A PETROLEUM SOLVENT TO AQUEOUS SOLUTION).
7 CHANGES IN METHOD USED FOR CALCULATIONS (E.G., EMISSION FACTOR CHANGE).
8 OTHER (DESCRIBE): _____
9 OTHER (DESCRIBE): _____

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

FOR APPLICANT'S USE
_____

APPLICATION PAGE 8-4GO _____

SECTION FOUR	FEE DATA				
1) WILL THE SOURCE PAY THE CURRENT MAXIMUM FEE OF $250,000.00 PER YEAR? ☐ YES IF YES, THE REMAINDER OF THIS FORM DOES NOT NEED TO BE COMPLETED. X NO					
2) EMISSION UNIT [A]	NITROGEN OXIDES (NO_X) (TONS/YR)	PARTICULATE MATTER (PART) (TONS/YR)	SULFUR DIOXIDE (SO_2) (TONS/YR)	VOLATILE ORGANIC MATERIAL (VOM) (TONS/YR)	OTHER [B] SPECIFY n-Hexane (TONS/YR)
PEUG1		19.4			
PEUG2		26.4			
PEUG4		0.5			
PEUG6		19.4			
Boiler & Grounds	126.23	22.95	65.75	6.2	17.6
				Note: n-hexane is not included in the VOC emissions	
3) SUBTOTAL	126.2	78.6	65.8	6.2	17.6
4) FUGITIVE	Included in the above				
5) TOTAL	126.2	78.6	65.8	6.2	17.6
6) GRAND TOTAL ACROSS POLLUTANTS (TONS/YR):					294
7) CALCULATED PERMIT FEE: IF GRAND TOTAL IN ITEM 6 ABOVE IS > 100 TONS/YR THEN MULTIPLY GRAND TOTAL BY $18.00 AND ENTER, OTHERWISE ENTER $1,800.00:					$5,292
8) MINIMUM PERMIT FEE IS $1,800.00 PER YEAR. MAXIMUM PERMIT FEE IS $250,000.00 PER YEAR. IF THE CALCULATED PERMIT FEE IN ITEM 7 ABOVE IS BETWEEN THESE TWO FEE AMOUNTS THEN ENTER HERE, OTHERWISE ENTER THE MINIMUM OR MAXIMUM PERMIT FEE, WHICHEVER IS APPLICABLE. THIS IS THE ACTUAL ANNUAL PERMIT FEE:					$5,292

A EMISSION UNIT - PROVIDE THE NAME AND FLOW DIAGRAM DESIGNATION OF THE EMISSION UNIT AS IT APPEARS ON THE DATA AND INFORMATION FORM.
B OTHER - ANY HAZARDOUS AIR POLLUTANT (HAP) NOT INCLUDED ELSEWHERE, E.G., CHLORINE, HCl, ETC.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL – PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

SUPPLEMENT TO CAAPP APPLICATION

FOR AGENCY USE ONLY

ID NUMBER:

PERMIT #:

DATE:

THIS FORM SHALL ACCOMPANY ANY SUPPLEMENT TO A CAAPP APPLICATION, THAT IS, ANY SUBMITTAL OF NEW OR CORRECTED INFORMATION FOR A PENDING CAAPP APPLICATION.

SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2) DATE FORM PREPARED: Nov. 9, 2010

3) SOURCE ID NO. (IF KNOWN): 183020ABT

SUPPLEMENT INFORMATION

4) DOES THIS SUPPLEMENT PROVIDE ADDITIONAL INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF NEW PAGES IN THIS SUPPLEMENT: 7

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	NEW PAGE #(S)
4-GRIT ASPIRATED GRAVITY TABLE SYSTEM	4-GRIT	1- to 7-4GO

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE

APPLICATION PAGE 10-4Go

5) DOES THIS SUPPLEMENT CORRECT PREVIOUSLY SUBMITTED INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF REVISED PAGES IN THE SUPPLEMENT: 17

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	OLD PAGE #(S)	NEW PAGE #(S)
4-GRIT ASPIRATED GRAVITY TABLE SYS	4-GRIT		8to24-4GO

SIGNATURE BLOCK

6) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION, AS AMENDED BY THIS SUPPLEMENT, ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____
AUTHORIZED SIGNATURE

Eastern Regional Manager - Milling
TITLE OF SIGNATORY

Dean Hughes
TYPED OR PRINTED NAME OF SIGNATORY

1 / 10 / 11
DATE

BUNGE MILLING, INC.
Facility ID 183020ABT

10-Nov-10

EMISSIONS INVENTORY REPORT
WORKSHEET

YEAR- MAX

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
PEUG1 Corn & Soybean Receiving, Cleaning and Storage								
			Base emissions on 1999 PM test on 5012-0005-0021 filter exhaust.	0.0017	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0069 filter exhaust.	0.00085	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.	0.00060	gr/acf			
Pre NSPS								
5012-0001-0016	301-02	1	TRUCK DUMP #1	8760	APM 40072.10	18,500	1.2	
5012-0010-0054	301-05	9	HOFFMAN BLDG 301 VAC	8760	HOFFMAN 48X96	1,000	0.1	
5012-0005-0029	301-01	10	WEST HDHS TRANS GEN ASP	8760	DD 484RF12	55,000	3.4	
5012-0003-0013	311-03	11	RHOMBO TRUCK DUMP #3	8760	APM SJL156-6	14,500	0.9	
5012-0004-0016	304-02	132	RAIL DUMP	8760	APM 41120.12	27,000	1.7	
5012-0009-0009	311-01	230	RHOMBO WEST GEN ASP	8760	APM SJL72-6	6,800	0.4	
5012-0003-0018	311-02	231	RHOMBO GALLERY GEN ASP	8760	APM SJL72-6	9,200	0.6	
5012-0010-0047			TRACK 6 VACUUM	8760	HOFFMAN	700	0.04	
4870-0013-0015	110-08	23	CLEANINGS DISCHARGE	8760	BUHLER 16S-6-30	1,900	0.04	
4750-0029-0015	201-08	99	CONVEYING GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.24	
5012-0000-0000			GRAIN RECEIVING FUGITIVES	8760	-	-	5.4	
NSPS								
5012-0005-0021	301-04	8	TRUCK DUMP #4 & W GAL GEN ASP	8760	DD 484RF12	36,017	2.3	
4870-0013-0001	110-09	24	CLEANING NORTH APM	8760	APM 41216.12	41,000	1.3	
4880-0034-0069	115-02		CORN CLEANING	8760	TD 484RF12	57,372	1.8	
5012-0002-0012	310-01	6	NORTH ST GRAIN/MEAL TRUCK DUMP #2	8760	DD 484RF12	20,000	1.3	
					Subtotal	276,589	19.4	
PEUG2 Dry Corn Milling, Processing and Products Handling								
			Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.	0.00060	gr/acf			
			Base emissions on 2000 PM10 test on 4880-0034-0077 filter exhaust.	0.00060	gr/acf			
4870-0010-0055	110-04	19	BEMIS BAGGING	8760	APM 16019.8	1,660	0.04	
4870-0010-0030	110-05	20	BAGGING GEN ASP	8760	APM 40020.8	3,400	0.08	
4870-0013-0019	110-07	22	BAGGING PACKER GEN ASP	8760	APM 14042.8	4,400	0.1	
4880-0042-0057	109-04	213	BRAN DRYER PROCESS	8760	APM 14036.8	2,200	0.05	
4880-0042-0062	109-03	214	BRAN SIFTER PROCESS	8760	APM 10144.8	6,215	0.1	
4880-0034-0054	109-02	215	EAST MEAL DRY/COOL	8760	APM 40120.10	13,000	0.3	
4880-0034-0059	109-01	216	WEST MEAL DRY	8760	APM 40144.8	13,295	0.3	
4880-0034-0035	105-06	217	S APM BINNING	8760	APM 41144.12	30,000	0.7	
4880-0034-0027	105-05	218	8TH FR DRACCO SCREENING	8760	DRACO 6MB-60	42,000	0.9	
4880-0034-0001	105-04	219	9TH FR DRACCO SCREENING	8760	DRACO 8MB-72	69,500	1.6	
4880-0032-0052	105-03	220	BLDG 105 VACUUM	8760	HOFFMAN	1,500	0.03	
4870-0021-0001	104-02	221	BULK LOADING WHITE GOODS	8760	DD 484RF12	36,000	0.8	
4870-0015-0016	104-01	222	BLDG 104 VACUUM	8760	HOFFMAN 38405A	1,500	0.03	
4880-0042-0054	103-06	223	BRAN BIN	8760	BUHLER 16S-6-30	980	0.02	
4880-0008-0028	103-05	224	6TH FLR SCREENING	8760	WIEDENMANN 2X4 LF150-1200	10,000	0.2	
4880-0008-0040	103-04	225	W 4TH FLR GRAVITY TABLES	8760	WIEDENMANN 2X5 LF225-2250	10,000	0.2	
4880-0034-0010	101-05	226	S LUNCHROOM SCREENING	8760	CD 484RF12	42,000	0.9	
4880-0034-0042	101-04	227	S CD SCREENING	8760	CD 484RF12	37,500	0.8	
4880-0034-0048	101-02	228	N CD GEN ASPIRATION	8760	CD 484RF12	30,000	0.7	
4880-0034-0019	101-01	229	N LUNCHROOM SCREENING	8760	CD 484RF12	36,000	0.8	
4870-0013-0024	115-01		PACKAGE & BULK LOADING	8760	TD 484RF12	42,000	0.9	
4880-0034-0077	115-03		CAMAS/BRAN	8760	TD 484RF12	45,021	1.0	
4880-0034-0071	115-04		THRU & TAIL STOCK DRYERS	8760	TD 484RF12	56,000	1.25	
4880-0032-0070	115-05		BLDG 115 VACUUM	8760	HOFFMAN	825	0.02	
4880-0044-0070	10-44:70		GRAVITY TABLE #3	8760	TORIT CPC-12	6,200	0.14	
4880-0044-0073	10-44:73		GRAVITY TABLE #4	8760	TORIT CPC-12	6,200	0.14	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4880-0044-0076	10-44-76		GRAVITY TABLE #5	8760	TORIT CPC-12	6,200	0.14	
4870-0005-0003			TRACK 2 UNLOAD SEC REC	8760	USS INC.	440	0.014	
4880-0009-0005			GERM GEN ASP	8760	APM 16030.4			
4932-0001-0001	348-01	87	LAB FILTER	8760	APM 14106.4	900	0.1	
4900-0003-0039	112-12A	70	AB FIN PROD SURGE NORTH	8760	MICROPUL 8B	742	0.02	
4900-0003-0045	112-12B	70	AB FIN PROD SURGE SOUTH	8760	MICROPUL 8B	742	0.02	
4990-0005-0012	112-13A	71	1/2 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0005-0042	112-13B	71	1/2 PULVOCRON VISC FLOUR REC	8760	BUHLER 9-6-100	380	0.01	
4990-0002-0010	112-13C	71	3/4 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0004-0013	112-14A	72	9/10 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0003-0010	112-14B	72	7/8 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0002-0019	112-15A	73	#3 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0002-0022	112-15B	73	#4 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0001-0039	112-15B	73	#5 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0021	112-15C	73	#1 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0024	112-15D	73	#2 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0003-0019	112-18A	75	#7 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0003-0022	112-18B	75	#8 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0022	112-18C	75	#9 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0025	112-18D	75	#10 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0002-0008	112-19A	76	3/4 PULVN GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0005-0010	112-19B	76	1/2 PULV GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0004-0011	112-20A	77	9/10 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0003-0008	112-20B	77	7/8 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0005-0028	112-21A	78	1/2 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0002-0026	112-21B	78	3/4 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0003-0026	112-22A	79	7/8 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0004-0029	112-22B	79	9/10 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0006-0024	112-27	83	HIBOND VISC FLAKE ROLLER MILL	8760	APM 15066.8	7,200	0.16	
4820-0001-0029	103-01		CSM BLENDED FOOD REC	8760	APM 40070.7	4,077	0.09	
4820-0001-0052	103-02		BLENDED FOOD PACK	8760	APM 16150.6	10,000	0.22	
4900-0001-0068	111-01		ALLBOND VISC FLOUR GEN ASP	8760	BUHLER 16-8-100	867	0.02	
4820-0003-0007	111-03		MILK BINS	8760	MICROPUL 6B	400	0.01	
4990-0007-0049	111-04		300 SERIES BINNING	8760	MICROPUL 1F1	4,452	0.10	
4990-0001-0002	111-07		SOY MEAL GEN ASP	8760	APM 16022.4	1,435	0.03	
4990-0001-0006	111-08		SOY MEAL SURGE	8760	MICROPUL 6B	500	0.01	
4990-0001-0025	111-10		MEAL BIN COOLER	8760	APM 400072.10	9,158	0.20	
4990-0002-0043	111-12		3/4 SOY FLOUR REC	8760	APM16014.8	700	0.02	
4820-0003-0072	111-13		TRI CAL BINS	8760	APM 16009.8	780	0.02	
4900-0001-0058	111-14A		5/6 ALLOND REC	8760	APM 16014.8	1,100	0.02	
4990-0003-0032	111-14B		7/8 SOY FLOUR REC	8760	APM 16014.8	1,100	0.02	
4990-0002-0033	111-15A		BIN 308	8760	MICROPUL 6B	500	0.01	
4820-0002-0072	111-15B		BIN 509	8760	MICROPUL 6B	500	0.01	
4820-0002-0068	111-15C		BIN 508	8760	MICROPUL 6B	500	0.01	
4820-0003-0038	111-15D		BIN 310	8760	MICROPUL 6B	500	0.01	
4990-0002-0036	111-15E		BIN 309	8760	MICROPUL 6B	500	0.01	
4990-0004-0037	111-17		9/10 PULVICRON REC	8760	BUHLER 16-6-220	700	0.02	
4820-0002-0038	111-18		MILK BINS	8760	MICROPUL 21-6-220	807	0.02	
4820-0002-0035	111-19		MILK BIN BAG DUMP	8760	APM 14048.6	6,000	0.13	
4990-0007-0029	111-21		BLENDING BATCH BIN GEN ASP	8760	BUHLER 25S-6-30	1,250	0.03	
4990-0007-0036	111-22		BLENDER GEN ASP	8760	BUHLER 16S-6-30	1,055	0.02	
4990-0007-0032	111-23		BLENDING GEN ASP	8760	MICROPUL 36S-8-30	1,645	0.04	
4820-0003-0063	111-24		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	3,200	0.07	
4820-0003-0059	111-25		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	2,739	0.06	
4990-0006-0040	111-27		GEN ASPIRATION	8760	BUHLER 9-8-220	742	0.02	
4900-0001-0091	111-28		#5 SL GEN ASP & #5 EXPANDER	8760	APM 14024.6	3,000	0.07	
4990-0011-0001	111-29		FIBER REC GEN ASP	8760	BUHLER 9-8-220	648	0.01	
4820-0002-0011	111-30		PCM BINNING	8760	MICROPUL 1F1	2,241	0.05	
4870-0010-0005	111-34		CF BRAN PACKING BINNING	8760	MICROPUL 25-8-220	1,232	0.03	
4900-0005-0035	111-36		BLDG 111 VACUUM	8760	HOFFMAN 60X120	1,500	0.03	
4870-0006-0006	111-37		110/210 REC GEN ASP	8760	APM 16030.4	1,400	0.03	
4990-0011-0029	111-38		FIBER REC GEN ASP	8760	APM 16019.4	1,000	0.02	
4990-0001-0029	111-41		COOLING TOWER	8760	APM 40072.10	14,000	0.31	
4820-0003-0022	111-42		INGREDIENT BIN 601	8760	MICROPUL 4B	210	0.00	
4820-0003-0026	111-43		INGREDIENT BIN 602	8760	MICROPUL 4B	210	0.00	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4820-0003-0030	111-44		INGREDIENT BIN 603	8760	MICROPUL 2 1/2 B	210	0.00	
4820-0003-0034	111-45		INGREDIENT BIN 604	8760	APM 15105.4	210	0.00	
4820-0003-0018	111-46		MICRO INGR DUMP FILTER	8760	APM 15105.4	2,500	0.06	
4820-0003-0004	111-47		MIXER GEN ASP	8760	BUHLER 25S-6-30	1,500	0.03	
4900-0001-0065	112-03		3/4 HAMMERMILL	8760	APM 16009.6	1,258	0.03	
4900-0001-0006	112-04		#3 & #4 EXPANDERS	8760	APM 16009.6	1,017	0.02	
4900-0005-0001	112-05		REPROCESS GEN CD ROOF	8760	CD 376RF10	27,550	0.62	
4900-0001-0042	112-08		#6 PULV GRINDER	8760	BUHLER 37-8-220	2,904	0.06	
4900-0001-0046	112-09		5/6 PULV AB FIN PROD SURGE BIN	8760	MICROPUL 4B	570	0.01	
4900-0002-0032	112-10		PELLET BINS	8760	BUHLER 16S-6-30	705	0.02	
4900-0003-0017	112-11A		#1 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0020	112-11B		#2 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0023	112-11C		#3 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0026	112-11D		#4 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0029	112-11E		#5 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4990-0006-0027	112-11F		VISCOSITY FLOUR REC	8760	APM 16022.8	2,143	0.05	
4990-0011-0010	112-17		COND RECEIVER/SOY MEAL GRIND	8760	APM 16014.8	1,350	0.03	
4900-0005-0007	112-24		GRIND REJECT/SCRAP BIN	8760	MICROPUL 2 1/2B	500	0.01	
4900-0005-0029	112-29		BLDG 112 VACUUM	8760	HOFFMAN	500	0.01	
4900-0001-0030	112-30		AB GRIND SURGE BIN	8760	BUHLER 37-8-220	2,100	0.05	
4900-0005-0006	112-31		N DAY GEN ASP & #5 EXPANDER	8760	CD 484RF12	36,000	0.81	
4820-0001-0093			BLENDED FOODS FILTER	8760	DD 124RF10	5,080	0.11	
4750-0029-0027	202-01	109	ROUND BIN GEN ASP	8760	APM 14072.6	7,134	0.16	
4912-0002-0054	209-01	116	HOMINY TRUCK LDOUT ASP	8760	DD 484RF12	37,000	0.83	
4860-0018-0007	208-05	119	N HOMINY FEED	8760	MICROPUL	14,000	0.31	
4860-0018-0003	208-06	123	S HOMINY FEED	8760	MICROPUL	15,000	0.34	
4860-0022-0017	208-15	133	SEC CLEAN GRINDING	8760	APM	2,000	0.04	
4860-0024-0003	208-12	177	BRAN DRYER	8760	CORONA CYCLONE	6,888	1.42	
4912-0006-0017	203-02	180	TRACK 16 BULK RAIL LDOUT	8760	WEIDENMAN LFT 2X7	30,000	0.67	
4860-0017-0073	202-07	181	FLAKING GEN ASP	8760	AERODYNE 7500 SVC	16,000	0.36	
4860-0023-0001	201-02	182	GERM DUSTERS ASP	8760	APM 40120.8	7,400	0.17	
4860-0017-0003	201-12		GERM DRYER	8760	CYCLONE	10,000	2.06	
4860-0017-0072			GERM ROLLS ASPIRATION	8760	CYCLONE	5,000	1.03	
4860-0019-0003	208-11	124	FTS DRYER ASPIRATION	8760	CORONA 15 CYCLONE	6,888	1.42	
4860-0024-0037	208-04	117	PET BRAN KICE LITES ASP	8760	MICROPUL	1,600	0.04	
4860-0017-0026			BIN 945 GERM RECEIVER	8760	BUHLER 36S-6-30	1,800	0.04	
					Subtotal	939.730	26.4	
~~PEUG3 CORN OIL EXTRACTION~~								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	**0.0055**	**gr/acf**			
~~4861-0006-0005~~	~~204-02~~	~~179~~	~~CORN EXTRACTOR, DISTILLATION, DT~~	~~8760~~	~~MIN-OIL-ABSORBER~~	0	MACT hex loss	0
~~4861-0003-0018~~	~~205-01~~	~~141~~	~~CORN MEAL DC PLANT #2~~	~~8760~~	~~MAC-CYCLONE~~	0	0.00	
					Subtotal	0	0.00	0
PEUG4 ~~SOYBEAN PREPERATION~~ CORN MILL PRODUCT STORAGE								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	**0.0055**	**gr/acf**			
			General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.	**0.00060**	**gr/acf**			
~~4750-0038-0003~~	~~215-01~~	~~134~~	~~E-W DRYER~~	~~8760~~	~~DUCON CYCLONE~~	0	0.00	
~~4750-0036-0001~~	~~215-02~~	~~175~~	~~E-W BEAN CLEANING ASP/DEHULL~~	~~8760~~	~~484RF12~~	0	0.00	
~~4750-0029-0042~~	~~201-03~~	~~94~~	~~6TH FLOOR DEHULL~~	~~8760~~	~~MICROPUL 100S-6-20~~	0	0.00	
~~4750-0017-0043~~	~~208-17~~	~~95~~	~~BEAN CONDITIONER~~	~~8760~~	~~DAY-CYCLONE~~	0	0.00	
~~4750-0018-0043~~	~~208-18~~	~~98~~	~~FLAKER ASP FLAKING SYSTEM~~	~~8760~~	~~DAY-CYCLONE~~	0	0.00	
4912-0008-0006	202-03	111	BLDG 201/202 VACUUM	8760	HOFFMAN	700	0.02	
4912-0009-0005	208-09	121	BLDG 208 VACUUM	8760	HOFFMAN	700	0.02	
4750-0029-0074	201-20		HOMINY FEED BINS ASPIRATION	8760	DONALDSON 276RFW12	21,000	0.47	
~~4860-0019-0003~~	~~208-11~~	~~124~~	~~FTS DRYER~~	~~8760~~	~~CORONA 15 CYCLONE~~	0	0.00	
					Subtotal	22,400	0.50	
~~PEUG6 SOYBEAN OIL EXTRACTION~~								
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	**0.0055**	**gr/acf**			
~~4750-0007-0004~~	~~204-01~~	~~136~~	~~SOLVENT EXT SOLVENT RECLAIM~~	~~8760~~	~~MIN-OIL-ABSORBER~~	0	Consent Decree	0
~~4750-0002-0018~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #1~~	~~8760~~	~~DAY-CYCLONE~~	0	0.00	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
~~4750-0002-0020~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #2~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0022~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #3~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
~~4750-0002-0024~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #4~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
					Subtotal	0	0.00	0
PEUG6 ~~SOYBEAN~~ CORN MILL PRODUCTS MILLING AND HANDLING								
			General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.	0.00060	gr/acf			
			Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.	0.0055	gr/acf			
4750-0029-0032	201-01	92	HOMINY BINNING	8760	APM 40240.8	30,000	0.67	
4750-0029-0001	201-10	101	HOMINY GRIND GEN ASP	8760	APM 40224.4	21,000	0.47	
~~4750-0023-0017~~	~~202-02~~	~~110~~	~~KAOLIN/CALCIUM BIN REC~~	~~8760~~	~~APM 16060.8~~	2,600	0.06	
4912-0004-0022	225-01	126	TRUCK HOMINY LOADOUT	8760	376RF8	34,960	0.78	
4912-0003-0011	226-01	127	RAIL HOMINY/GRAIN LOADOUT #1	8760	376RF12	34,960	0.78	
~~4750-0029-0061~~	~~212-02~~	~~128~~	~~MEAL BINNING~~	~~8760~~	~~WEIDENMAN~~	15,640	0.35	
4750-0033-0001	234-01	130	LTMS & RAIL HOMINY/GRAIN TRANSFER	8760	376RF8	20,000	0.45	
4750-0033-0011	234-02	130	LTMS & RAIL HOMINY/GRAIN LOADOUT	8760	MAC 144MCF416	34,600	0.77	
4750-0025-0015	201-19		FLOUR PELLET COOLER	8760	MAC HE 39	8,000	2.55	
4750-0029-0045			HOMINY SCREENER GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.17	
4750-0033-0000A			LTMS TRUCK/RAIL HOMINY/GRAIN DUMP	75,000 tons	-	-	0.01	
4750-0033-0000B			LTMS TRUCK HOMINY/GRAIN LOADOUT	75,000 tons	-	-	0.4	
4912-0000-0000			HOMINY LOADOUT FUGITIVES	2801	-	-	1.9	
4912-0000-0001			GRAIN LOADOUT FUGITIVES	5867			0.10	
					Subtotal	209,360	9.4	
BOILER HOUSE/GROUNDS								
			General: Base emissions on best estimate.	0.005	gr/acf			
			Coal receiving:	0.02	#/ton received			
FM-26		143	B&W TYPE FM PACKAGE BOILER	8,760	LOW NOx			
~~CFB BOILER~~		~~144~~	~~CFB FLUIDIZED BED BOILER~~	~~8,760~~	~~BAGHOUSE & NOx Red~~			
~~F-1000~~			~~COAL RECEIVING FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-109~~			~~COAL CRUSHER FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-1001~~			~~ASH LOADOUT FUGITIVES~~		~~fugitives~~		0.00	
~~CP-104~~			~~REINJECTION BIN~~	~~8,760~~	~~M2~~	0	0.00	
~~F-104~~			~~COAL BUNKER~~	~~8,760~~	~~M3~~	0	0.00	
~~F-105~~			~~LIMESTONE SILO~~	~~8,760~~	~~M4~~	0	0.00	
~~F-103~~			~~COAL SILO~~	~~8,760~~	~~M5~~	0	0.00	
~~F-101~~			~~ASH SILO PNEUMATIC RECEIVER~~	~~8,760~~	~~M6~~	0	0.00	
~~F-102~~			~~ASH SILO BINVENT & LOADOUT FILTER~~	~~8,760~~		0	0.00	
~~CP-104A~~			~~SYSTEM C STORAGE~~	~~8,760~~	~~M7~~	0	0.00	
~~F-108~~			~~COAL HANDLING~~	~~8,760~~	~~F-108~~	0	0.00	
DG-100		152	EMERGENCY GENERATOR	39				
TK-108		153	FUEL OIL TANK	8,760	150,000 GAL			0.016
~~L OIL 3~~			~~GASOLINE VEHICLE TANK~~	~~8,760~~	~~500 gallons~~			0.000
					Subtotal	0	0.0	0.016

TOTAL PLANT

	PM10	SO2	NOx	NMVOM	CO	Pb	HAPS n-hexane	HAPS HF	HAPS HCl	NH3	Hg	PM2.5	PM
	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
process sources	55.7	0	0	0.0	0	0	0					9.5	79.57
~~solvent extraction~~													
~~CFB~~													
B&W Type FM boiler	22.95	65.75	126.23	6.14	93.77	0	17.6			6.70	0.00095	2.12	22.95
fuel handling				0.016									
TOTAL PLANT	78.6	65.8	126.23	6.2	93.8	0.0	17.6	0.0	0.0	6.7	0.00095	11.58	102.52

TOTAL PLANT	294.3
GRAND TOTAL	294

PART 102.5

FEE $18.00 PER TON

ANNUAL FEE $5,292.00

BUNGE MILLING, INC.
Facility ID 183020ABT

1/10/2011

EMISSIONS INVENTORY REPORT WORKSHEET

YEAR- max

Process Materials Loadout

PM Emission Factor	0.27	lb/ton	(AP-42, Section 9.11.1, Table 4.5)			
PM10 Emission Factor	0.04	lb/ton	(Vegetable Oil Processing)		SCC 3-02-007-91	
PM10/PM ratio	0.15	AIRS Mar 1990				
Rate/hour	336,000	pounds	% of scale weight	0.0%	soy meal/soy bean	**Operation Schedule**
	168	tons		10.1%	BPMOE/corn	8 hr/day
Rate/year	940,999	tons hominy		82.0%	germ/corn	7 days/week
Capture efficiency	90	% aspirated loadout hood				51 weeks/yr
Operation	2801	hours/year - increased by 100% to reflect actual loadout rate				

Potential PM emissions, excluding fugitives = Emission factor * process rate* capture effy/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture effy/100)
= 40.8 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
= 114.3 tons/year

Potential PM10 emissions, excluding fugitives = Emission factor * process rate*(capture eff/100)

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture eff/100)
= 6.0 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year/(2000 lb/ton)*(capture effy/100)
= 16.9 tons/year

Potential fugitive PM emissions = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= 4.5 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y)/100)/(2000 lb/ton)
= 12.7 tons/year

Potential fugitive PM10 emissions = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= 0.7 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
= 1.9 tons/year

Grain Loadout

PM Emission Factor	0.027	lb/ton	(AP-42, Section 9.9.1.1, Table 9.9.1-1)					
PM10 Emission Factor	0.0022	lb/ton	Grain Elevators & Processes			SCC 3-02-005-63		
PM2.5 Emission Factor	0.00037					**Operation Schedule**		
Rate/hour	300,000	pounds	5000	BU		TYPICAL	MAXIMUM	
	150	tons				8	23	hr/day
Rate/year	880,000	tons	29,333,333	BU		5	5	days/week
Capture efficiency	90	% aspirated loadout hood				50	51	weeks/yr
Operation	5867	hours/year				2000	5867	

Potential PM emissions, excluding fugitives = Emission factor * process rate* capture effy/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture effy/100)

	=	3.6 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
	=	10.7 tons/year
Potential PM10 emissions, excluding fugitives	=	Emission factor * process rate*(capture eff/100)
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*(capture eff/100)
	=	0.30 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
	=	0.87 tons/year
Potential PM2.5 emissions, excluding fugitives	=	Emission factor * process rate*(capture eff/100)
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*(capture eff/100)
	=	0.050 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
	=	0.15 tons/year
Potential fugitive PM emissions	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	0.41 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y)/100)/(2000 lb/ton)
	=	1.2 tons/year
Potential fugitive PM10 emissions	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	0.033 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
	=	0.10 tons/year
Potential fugitive PM2.5 emissions	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	0.0056 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
	=	0.016 tons/year

Bunge Milling Inc.
Danville, IL
183020ABT
LTMS Grain Handling

Revised: 8-Jun-10

The Long Term Meal System (LTMS) was permitted, constructed and initially operated in 1985 (approval 85010031). The approval was for a pneimatic conveying system from existing meal and grain storage to LTMS, a meal bulk storage building, conveying from LTMS storage to rail loadout, a meal rail loadout system and an associated dust control RJ baghouse. Subsequently approval 01070073 was granted for the construction of 24 elevated meal loadout bins, replacement of the pneumatic conveying system with totally enclosed belt conveyors and a second dust control filter - MAC. The aspiration system was revised for improved dust control. See attached flow diagrams. EU 4750-0033-0001 applies to the operations associated with the LTMS RJ filter; EU 4750-033-0011 to those asociated with the LTMS MAC filter.

The existing LTMS system includes a receiving pit aspirated to the LTMS MAC filter, as documented in the application for the MAC filter, etc. The pit has historically been used to off-load meal from rail cars due either to quality or gross weight concerns. The drag conveyor below the pit feeds the conveying system normally used to elevate meal into the LTMS storage building. The conveying system is aspirated to the LTMS RJ filter. This application requests approval to receive grain from either hopper rail cars or hopper trucks at the LTMS aspirated pit for storage in LTMS. After temporary storage the grain will be loaded into hopper bottom trucks and received at the grain elevator. Therefore, additional handling versus grain normally handled at the elevator includes the LTMS receiving and loadout operation. Filter emissions are curently permitted. Any handling of grain will subtract from time available for the handling of meal, and associated operation of the two aspiration systems.

New emissions associated with grain receiving and loadout at LTMS.

LTMS TRUCK/RAIL DUMP
4750-0033-0011

PM Emission Factor	0.035	lb/ton	(Table 9.9.1-1, Hopper Truck Receiving AP-42, 3/03)	
PM10 Emission Factor	0.0078	lb/ton	SCC30200552 & 30200553	
PM10/PM ratio	0.22		Operation at capacity	
Unloading rate/hour	300	tons		20 hours/day
Unloading rate/year	75,000	tons maximum limit requested		12.5 days/year
Capture efficiency	95	% due to shed enclosure and aspiration		~2 week/year
Pit area	21.8	sq ft		
Pit aspiration	4364	ACFM		
Pit aspiration face velocity	200	fpm		
Operation	250	hours/year at capacity		250 hours/year

Potential PM emissions due to grain unloading, excluding fugitives = Emission factor * process rate * capture effy/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture effy/100)
= 10.0 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
= 1.2 tons/year

Potential PM10 emissions due to grain unloading, excluding fugitives = Emission factor * process rate *(capture eff/100)

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture eff/100)
= 2.2 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year/(2000 lb/ton)*(capture effy/100)
= 0.3 tons/year

Potential fugitive PM emissions due to grain unloading	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	0.53 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y)/100)/(2000 lb/ton)
	=	0.1 tons/year
Potential fugitive PM10 emissions due to grain unloading	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	0.1 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
	=	0.01 tons/year

All grain handling systems except for the receiving pit are totally enclosed with no potential emissions. Emisions of the LTMS MAC filter are currently permited at 8760 hours of operation per year.

LTMS GRAIN HANDLING
4750-0033-0001
All grain handling systems are totally enclosed or inside the LTMS building with no potential emissions. Emisions of the LTMS RJ filter are currently permited at 8760 hours of operation per year.

LTMS TRUCK LOADOUT
4750-0033-0000
Grain loadout will be conducted by endloader operating inside the LTMS building loading the hopper of a belt style truck loader, also located inside the building, which will discharge the grain into the transfer haul hopper trucks.

PM Emission Factor	0.086	lb/ton	(Table 9.9.1-1, Truck Loadout AP-42, 3/03)	
PM10 Emission Factor	0.029	lb/ton	SCC30200560	
PM10/PM ratio	0.34		Operation at capacity	
Unloading rate/hour	300	tons		20 hours/day
Unloading rate/year	75,000	tons maximum limit requested		12.5 days/year
Capture efficiency	60	% due to shed enclosure		~2 week/year
Operation	250	hours/year at capacity		250 hours/year

Potential PM emissions due to grain loadout, excluding fugitives	=	Emission factor * process rate * capture effy/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*(capture effy/100)
	=	15.5 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
	=	1.9 tons/year
Potential PM10 emissions due to grain loadout, excluding fugitives	=	Emission factor * process rate *(capture eff/100)
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*(capture eff/100)
	=	5.2 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year/(2000 lb/ton)*(capture effy/100)
	=	0.7 tons/year

Potential fugitive PM emissions due to grain loadout	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	10.3 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y)/100)/(2000 lb/ton)
	=	1.3 tons/year
Potential fugitive PM10 emissions due to grain loadout	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	3.5 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
	=	0.44 tons/year

Increase in potential emissions - all fugitive

	Tons per year		Lbs per hour	
	PM	PM10	PM	PM10
LTMS TRUCK/RAIL DUMP	0.1	0.01	0.5	0.1
LTMS GRAIN HANDLING	0.0	0.0	0.0	0.0
LTMS TRUCK LOADOUT	1.3	0.4	10.3	3.5
Total	1.4	0.4	10.8	3.6
Monthly			0.17	0.06

Existing potential emissions - filter exhaust point sources

LTMS & RAIL MEAL TRANSFER - RF	0.45	0.45	0.10	0.10
LTMS & RAIL MEAL LOADOUT - MAC	0.77	0.77	0.18	0.18
Total	1.2	1.2	0.3	0.3
Monthly			0.003	0.003
Grand Total	2.6	1.7	11.1	3.9
Monthly			0.2	0.1

Allowed Emissions

E=2.54P ^0.534

P =	300	tph max
E =	53.41	pph
Max operation	500	hours/yr
Allowed emissions	13.35	tpy

BUNGE MILLING, INC.
Facility ID 183020ABT 1/10/2011

EMISSIONS INVENTORY REPORT WORKSHEET

YEAR- max

All grain receiving operations

PM Emission Factor	0.18	lb/ton	(Table 9.9.1-1, Straignht Truck Receiving AP-42, 5/98)	
PM10 Emission Factor	0.059	lb/ton	SCC30200551	
PM10/PM ratio	0.33		Operation	
Unloading rate/hour		tons		16 hours/day
Bushels processed	bushels	tons		
corn	36,500,000	1,022,000		
beans/wheat	27,000,000	810,000		
Unloading rate/year	1,832,000	tons		340 days/year
Capture efficiency	90	% due to shed enclosure and aspiration		week/year
Operation	5,440	hours/year		5,440 hours/year

Potential PM emissions due to grain unloading, excluding fugitives = Emission factor * process rate * capture effy/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture effy/100)
= lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
= 148.4 tons/year

Potential PM10 emissions due to grain unloading, excluding fugitives = Emission factor * process rate *(capture eff/100)

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture eff/100)
= lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year/(2000 lb/ton)*(capture effy/100)
= 48.6 tons/year

Potential fugitive PM emissions due to grain unloading = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y)/100)/(2000 lb/ton)
= 16.5 tons/year

Potential fugitive PM10 emissions due to grain unloading = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
= 5.4 tons/year

Solvent loss limits:

Consent Decree:	soy	0.19	gal/ton crush - 12 month average
	corn	0.7	gal/ton crush based on 64% n-hexane solvent content - 12 month average
35 IAC 215:	soy	0.0026	lb VOM/pound crush - 180 day average
	corn	2.2	gal/ton corn germ processed - 180 day average
Permit 991000012:	soy	0.3	gal/ton crush - 12 month average
	corn	1.2	gal/ton crush - 12 month average

Permit analysis- Title V solvent loss

SOY	140,000	BPD				
	1,470,000	TPY CRUSH				
	Consent Decree		35 IAC 215	Permit 991000012		
	279,300	GAL/YR		441,000		
	796	TON HEX/YR	3.822		509.44	TON N-HEX/YR
	5.7	LB/GAL				
CORN	40,500	LB/HR				
	16,200	BU/DA				
	177,390	TPY CRUSH				
	Consent Decree		35 IAC 215	Permit 991000012		
	124,173	GAL/YR	390,258	212,868		
	354	TON HEX/YR			226.49	TON N-HEX/YR
	5.7	LB/GAL				

TOT HEX LOSS

1,150 Ton/year - 12 month average

BUNGE MILLING, INC.
Facility ID 183020ABT

1/10/2011

EMISSIONS INVENTORY REPORT WORKSHEET

YEAR- MAX

BOILER HOUSE

B&W Type FM PACKAGE BOILER ~~Note: Zero emissions since FBC presummed to operate 8760 hours/year at max capacity~~
SCC 1-02-006-01

CEM data — NOx lb/mmBTU 0.11

Emission factors for natural gas combustion are from AP42, Tables 1.4-1,-2,-3, July 1998, except for NOx CEM data and oil PM permit limits. Limits - tpy

NOx CEM = 0.11 lb/mmBTU 155.3805
= 113.08 lb/mmcu ft n-gas

Heat input/boiler 262.0 Million BTU/hr
Number of boilers 1

Unit	PM (lb/unit)	PM10 (lb/unit)	PM2.5 (lb/unit)	SO2 (lb/unit)	NOx (lb/unit)	VOC (lb/unit)	CO (lb/unit)	Hexane (lb/unit)	Hg (lb/unit)	NH3 (lb/unit)
million cu. ft. burned	1.9	7.6	1.9	0.6	113.08	5.5	84	1.8	2.60E-04	3.2

Natural gas usage = 2,232.6 Million cu ft/year max basis 1028 Btu/cf 8760 hr/yr

Fuel Use Mcf/yr	PM ton/year	PM10 ton/year	PM2.5 ton/year	SO2 ton/year	NOx ton/year	VOC ton/year	CO ton/year	Hexane ton/year	Hg ton/year	NH3 ton/year
2232.6	2.12	8.48	2.12	0.67	126.2	6.14	93.8	2.0	0.00029	3.6

Emission factors for fuel oil combustion taken from AP42, Tables 1.3-1 & -3,September 1998, except for NOx CEM data and PM permit limits.. limits tpy

SCC 102005-01
CO limit = 200 ppm 47
SO2 limit = 0.3 lb/mmBtu 3.1
NOx CEM = 0.11 lb/mmBTU 234.8
= 15.07 lb/1000 gal oil
PM limit = 0.02 lb/mmBTU 3.5
= 2.74 lb/1000 gal oil

Heat input 262.0 Million BTU/hr capacity
137,000 BTU/gal
0.05% S: sulfur content

Unit	PM (lb/unit)	PM10 (lb/unit)	PM2.5 (lb/unit)	SO2 (157S*lb/unit)	NOx (lb/unit)	NMVOC (lb/unit)	CO (lb/unit)	Hexane (lb/unit)	Hg (lb/unit)	NH3 (lb/unit)
1000 gallons burned	2.74	2.74	0.25	7.85	15.07	0.2	5	2.1	1.13E-04	0.8

Fuel oil usage = 16,753 1000 gal/yr max

Fuel Use 1000 gal/yr	PM ton/year	PM10 ton/year	PM2.5 ton/year	SO2 ton/year	NOx ton/year	NMVOC ton/year	CO ton/year	Hexane ton/year	Hg ton/year	NH3 ton/year
16752.701	22.95	22.95	2.09	65.75	126.23	1.68	41.88	17.59	0.00095	6.70

Boiler emissions	PM ton/year	PM10 ton/year	PM2.5 ton/year	SO2 ton/year	NOx ton/year	NMVOC ton/year	CO ton/year	Hexane ton/year	Hg ton/year	NH3 ton/year
Emissions max, either NG or FO	22.95	22.95	2.12	65.75	126.23	6.14	93.77	17.59	0.00095	6.70

CFB

SCC 1-02-002-17

Emission factors for natural gas combustion are from AP42, Tables 1.4-1, -2, -3, July 1998, except for NOx & SO2 CEM data and PM permit limits..

							350	decatherm/startup			
Heat input/boiler	322.5	Million BTU/hr					350,000,000	btu/startup			
Number of boilers	1						7	startups	SO2 CEM =	0.647	lb/mmBTU
VOC emission factor	5.5	lb/10^6 cf n-gas					0.35	mmcu ft	=	647	lb/mmcu ft n-gas
									NOx CEM =	0.11	lb/mmBTU
	Unit	PM (lb/unit)	PM10 (lb/unit)	SO2 (lb/unit)	NOx (lb/unit)	VOC (lb/unit)	CO (lb/unit)		=	110	lb/mmcu ft n-gas
									PM limit =	0.05	lb/mmBTU
	million cu. ft. burned	7.6	7.6	0.6	110	5.5	84		=	50	lb/mmcu ft n-gas

Natural gas usage	=	2.45	Million cu ft/year				plant data	
	Fuel Use	PM	PM10	SO2	NOx	VOC	CO	
	Mcf/yr	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	
	2.45	0.009	0.009	0.0007	0.135	0.007	0.103	

Emission factors for coal combustion taken from permit limit, CEM or AP-42.

Heat input	322.5	Million BTU/hr capacity					qrtr 2001	tons	% A	% S	btu/lb	tot mmbtu		
	136,735	Tons burned - max					1	30,448	12.56	2.16	10,504	639,645		
	10,331	BTU/lb					2	24,610	12.37	2.04	10,427	513,212		
	2.10	% sulfur					3	20,545	12.81	2.27	10,300	423,225		
		ppm Hg					4	28,713	12.60	1.94	10,086	579,204		
							tot/ave	104,316	12.59	2.10	10,329	2,155,287		
											hours	7862		
	Unit	PM (lb/unit)	PM10 (lb/unit)	PM2.5 (lb/unit)	SO2 (lb/unit)	NOx (lb/unit)	NMVOC (lb/unit)	CO (lb/unit)	Pb (lb/unit)	HF (lb/unit)	HCl (lb/unit)	NH3 (lb/unit)	Hg (lb/unit)	n-hexane (lb/unit)
	mmBTU	0.05	0.05	0.000009	0.76	0.11	0.003	0.029	2.03E-05	7.26E-03	0.058	0.0273	4.9E-06	6.70E-05
	Fuel Use max	PM	PM10	PM2.5	SO2	NOx	NMVOC	CO	Pb	HF	HCl	NH3	Hg	n-hexane
	mmBTU	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	(ton/yr)	(ton/yr)	(ton/yr)
	2,825,100.0	70.63	70.63	0.013	1073.54	155.38	4.79	41.02	0.03	10.26	82.04	38.63	0.01	0.09
CFB Boiler emissions		PM	PM10	PM2.5	SO2	NOx	NMVOC	CO	Pb	HF	HCl	NH3	Hg	n-hexane
		ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	(ton/yr)	(ton/yr)	(ton/yr)
		70.64	70.64	0.02	1073.54	155.52	4.79	41.12	0.03	10.3	82.0	38.63	5.67E-03	9.46E-02

ASH LOADOUT FUGITIVES

F-1001

PM Emission Factor	0.82	lb/ton	AP-42, SCC 3-05-007-19, Cement loadout times	3.4						
PM10 Emission Factor	0.16	lb/ton								
PM10/PM ratio	0.20									
Rate/hour	200,000	pounds		Typical Operation Schedule - coal						
	100	tons		4.5	hr/day @	0.25	hrs/truck @	18	trucks/day	
Rate/year	41,020	tons max - coal ash + limestone		5	days/week		@	25	tons/truck	
Control	97	% - aspirated & telescoping loadout spout w/ truck covered during loadout		50	weeks/yr					
Operation	410	hours/year		1125	hr/yr					
				Typical Operation Schedule - Limestone						
PM emissions	=	Emission factor * process rate * control		1.5	hr/day @	0.75	hrs/truck @	2	trucks/day	
a. Max Hourly	=	(lb/ton)*(ton/hour)*(100-cap eff)/100		5	days/week		@	25	tons/truck	
	=	2.4	lbs/hour	50	weeks/yr					
				375	hr/yr					

R001046

~~b. Max Yearly~~ = ~~(lb/ton)*(ton/year)/(2000 lb/ton)*(100-cap eff)/100~~
= ~~0.50~~ ~~tons/year~~

~~PM10 emissions~~ = ~~Emission factor * process rate * control~~
~~a. Max Hourly~~ = ~~(lb/ton)*(ton/hour)~~
= ~~0.49~~ ~~lbs/hour~~

~~b. Max Yearly~~ = ~~(lb/ton)*(ton/year)/(2000 lb/ton)~~
= ~~0.10~~ ~~tons/year~~

~~Max allowable emissions~~ = ~~$2.54P^{0.534}$~~
= ~~29.7~~ ~~lb/hr~~
~~130.1~~ ~~ton/yr~~

~~Required efficiency~~ = ~~63.60%~~

R001047

ILR,35,B,I,c, 212.321(b)(1)

E = A (P) (superscript B)

E =	lb/hr allowed emissions	
A =	2.54	
P =	25	ton/hr proc rate max
B =	0.534	

E = 14.0 lb/hr

Eff = (Inlet - Allowed)/Inlet

Inlet load =	2.5	grains/cf maximum
Flow =	6200	cfm
Inlet =	132.86	lb/hr
Eff =	89.46%	minimum

Actual emissions =	0.14	ton/yr each of 3 filters
	0.032	lb/hr each of 3 filters

Cloth	804	sq ft
Air	6200	cfm
A:C	7.71	fpm

BUNGE

Enhancing the Value of America's Harvest[SM]

April 21, 2011

183020ABT
96020027

Ewin C. Bakowski, PE.
Manager, Permit Section
Illinois Environmental Protection Agency
Division of Air Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62702

Bunge North America, Inc.
321 E. North Street, Danville
ID No. 183020ABT
CAAPP Permit
Minor Title V Permit Modification Application

Dear Mr. Bakowski:

Please find enclosed two copies of an application package for a minor modification to the CAAPP permit for our facility. The facility currently has an operating permit Application No. 96020027.

The enclosed application is submitted to request approval to incorporate into our Title V permit the operation of modifications to four of our corn mill systems to improve our bran flour yield. A separate application has been submitted requesting approval to construct. Also addressed in this operating permit application is the emergency generator, which was previously covered under the insignificant activity source exemption.

If you have any questions about this permit application package, please do not hesitate to contact Bob Henricks at (314) 292-2342, email robert.henricks@bunge.com.

Sincerely,
Bunge North America, Inc.

Dean Hughes
Eastern Regional Manager - Milling

Enclosure: Application in duplicate

p.c.: Aric Silver, corp. file

RECEIVED
MAY 02 2011
Illinois Environmental Protection Agency
BUREAU OF AIR
STATE OF ILLINOIS

BUNGE

Enhancing the Value of America's Harvest[SM]

Description of Application

The Bunge North America, Inc. - Danville (Bunge) facility proposes to improve the yield of bran flour. Specifically, Bunge requests approval of IEPA to add the following equipment:

1. Pneumatic blower packages: 3
2. Pneumatic blower receiver for existing blower system: 1
3. Rotex sifter: 1
4. Steam dryer: 1
5. Steam dryer product collector cyclone: 1
6. Hammermill and product collector: 1
7. GW sifter: 2
8. Miscellaneous spouting

This equipment will result in increases in air flow for three baghouse systems/process units as follows:
1. Bran Dryer Filter Process Unit: Increase air volume from 2200 cfm permitted to 2800 cfm.
2. Bran Sifter Filter Process Unit: Increase air volume from 6215 cfm permitted to 8230 cfm.
3. Bran Bin Filter: Increase air volume from 980 cfm permitted to 1960 cfm.

The modifications will increase the permitted emissions of the plant. Calculations associated with the increases to annual permitted emissions are addressed on the enclosed emissions spreadsheet.

Table of Contents

The following completed forms and supplemental information is submitted:

ITEM	NAME	PAGE(S)
200 CAAPP	Application for CAAPP Permit	1-BFI – 4-BFI
271CAAPP	Application for Modification to a CAAPP Permit	6-BFI – 7-BFI
292 CAAPP	Fee Determination for CAAPP Permit	8-BFI – 9-BFI
505 CAAPP	Supplement to CAAPP Application	10-BFI – 11-BFI
	Emission Calculation Sheets	12-BFI – 28-BFI

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL – PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: FESOP
Date: ____ / ____ / ____
Page ____ of ____
Source Designation: ____

APPLICATION FOR CAAPP PERMIT
(CHECK ONLY ONE)

- ☐ INITIAL APPLICATION
- ☐ RENEWAL APPLICATION
- ☒ SIGNIFICANT MODIFICATION

FOR AGENCY USE ONLY
ID NUMBER:
PERMIT #:
DATE:

SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.		2) DATE FORM COMPLETED: 04/20/11
3) SOURCE STREET ADDRESS: 321 E. North Street		
4) CITY: Danville		5) ZIP: 61832
6) IS THE SOURCE LOCATED WITHIN CITY LIMITS? ☒ YES ☐ NO		
7) TOWNSHIP NAME: Danville	8) COUNTY: Vermillion	9) TYPICAL NO. OF EMPLOYEES AT THE SOURCE:
10) ILLINOIS AIR POLLUTION SOURCE ID NO. (IF KNOWN): 183020ABT	11) FEDERAL EMPLOYER IDENTIFICATION NO. (FEIN): 37-0614689	
12) TYPE OF SOURCE AND PRODUCTS PRODUCED: Dry Corn Mill & Merchandizing Grain Elevator		
13) PRIMARY STANDARD INDUSTRIAL CLASSIFICATION (SIC) CATEGORY: Flour & Other Grain Mill Products		14) PRIMARY SIC NO.: 2041 (NAICS #: 311211)
15a) LATITUDE (DD:MM:SS): 40° 7' 36"	b) LONGITUDE (DD:MM:SS): 87° 37' 24"	
16a) UTM ZONE:	b) UTM VERTICAL (KM):	c) UTM HORIZONTAL (KM):
17a) COORDINATE METHOD: I	b) REFERENCE LOCATION: Center of Plant	c) COORDINATE ACCURACY: 1 second
18) SOURCE ENVIRONMENTAL CONTACT PERSON: Eric Silver	19) CONTACT PERSON'S TELEPHONE NO.: (217) 443-9784	

RECEIVED
MAY 02 2011
Illinois Environmental Protection Agency
BUREAU OF AIR
STATE OF ILLINOIS

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE

APPLICATION PAGE 1 BFI

OWNER INFORMATION

20) NAME: Bunge North America, Inc.

21) ADDRESS: 11720 Borman Drive

22) CITY:	23) STATE:	24) ZIP:
St. Louis	MO	63146-1000

25) OWNER'S AGENT (IF APPLICABLE): NA

OPERATOR INFORMATION

26) NAME: SAME AS SOURCE

27) ADDRESS:

28) CITY:	29) STATE:	30) ZIP:

BILLING INFORMATION

31) NAME: Bunge North America, Inc.

32) ADDRESS: 321 E. North Street

33) CITY:	34) STATE:	35) ZIP:
Danville	IL	61832

36) CONTACT PERSON:	37) CONTACT PERSON'S TELEPHONE NO.:
Dean Hughes 217-442-9782	

APPLICANT INFORMATION

38) WHO IS THE PERMIT APPLICANT? (CHECK ONE): ☒ OWNER ☐ OPERATOR

39) ALL CORRESPONDENCE TO: (CHECK ONE) ☐ OWNER ☒ SOURCE ☐ OPERATOR

40) ATTENTION NAME AND/OR TITLE FOR WRITTEN CORRESPONDENCE: Dean Hughes, Eastern Regional Manager - Milling

41) TECHNICAL CONTACT PERSON FOR APPLICATION:	42) CONTACT PERSON'S TELEPHONE NO.:
Robert Henricks 314-292-2342	

SUMMARY OF APPLICATION CONTENTS

NOTE: ITEMS 43 TO 62 WILL BE USED FOR APPLICATION COMPLETENESS DETERMINATION.

43) DOES THE APPLICATION INCLUDE A TABLE OF CONTENTS?	☒ YES ☐ NO
44) DOES THE APPLICATION INCLUDE A LIST OF ALL ITEMS AND ACTIVITIES FOR WHICH A PERMIT IS BEING SOUGHT?	☒ YES ☐ NO
45) DOES THE APPLICATION INCLUDE A PLOT PLAN AND/OR MAP DEPICTING THE AREA WITHIN ONE-QUARTER MILE OF THE SOURCE?	☐ YES ☒ NO
46) DOES THE APPLICATION INCLUDE A PROCESS FLOW DIAGRAM(S) SHOWING ALL EMISSION UNITS AND CONTROL EQUIPMENT, AND THEIR RELATIONSHIP?	☐ YES ☒ NO
47) DOES THE APPLICATION INCLUDE A COMPLETE PROCESS DESCRIPTION FOR THE SOURCE?	☒ YES ☐ NO
48a) DOES THE APPLICATION INCLUDE THE APPROPRIATE, COMPLETED FORMS FOR ALL INDIVIDUAL EMSSION UNITS AND AIR POLLUTION CONTROL EQUIPMENT, LISTING ALL APPLICABLE REQUIREMENTS AND PROPOSED EXEMPTIONS FROM OTHERWISE APPLICABLE REQUIREMENTS?	☐ YES ☒ NO
b) DOES THE APPLICATION ADDRESS OTHER MODES OF OPERATION FOR WHICH A PERMIT IS BEING SOUGHT?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
c) DOES THE APPLICATION INCLUDE ALL REASONABLY ANTICIPATED OPERATING SCENARIOS FOR WHICH A PERMIT IS BEING SOUGHT?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
49) DOES THE APPLICATION INCLUDE A COMPLETED "FUGITIVE EMISSION" FORM 391-CAAPP?	☐ YES ☒ NO
50) DOES THE APPLICATION INCLUDE A COMPLETED "FEE DETERMINATION FOR CAAPP PERMIT" FORM 292-CAAPP? (NOTE: ANNUAL FEES WILL BE BASED UPON INFORMATION CONTAINED IN THIS FORM.)	☒ YES ☐ NO
51) DOES THE APPLICATION INCLUDE A COMPLETED "HAZARDOUS AIR POLLUTANT EMISSION SUMMARY" FORM 215-CAAPP?	☐ YES ☒ NO
52) DOES THE APPLICATION INCLUDE THE CALCULATIONS ON WHICH THE FOLLOWING, TO THE EXTENT THEY ARE RELATED TO AIR EMISSIONS, WERE BASED: • POLLUTANT EMISSION RATES, • FUELS AND RAW MATERIALS USAGE, AND • CONTROL EQUIPMENT EFFICIENCY?	☒ YES ☐ NO
53) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT" FORM 293-CAAPP?	☐ YES ☒ NO
54) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE CERTIFICATION" FORM 296-CAAPP?	☐ YES ☒ NO
55) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE-ADDENDUM FOR NONCOMPLYING EMISSION UNITS" FORM 294-CAAPP FOR ONE OR MORE NONCOMPLIANT EMISSION UNITS FOR WHICH ISSUANCE OF A CAAPP PERMIT IS REQUESTED?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE

56)	HAS THE APPLICANT RETAINED A COPY OF THIS APPLICATION AT THE SOURCE? (NOTE: IF TRADE SECRET INFORMATION IS NOT BEING SUBMITTED, THEN ONLY THE ORIGINAL APPLICATION NEED BE INITIALLY SUBMITTED, HOWEVER, THE ILLINOIS EPA MAY REQUEST UP TO 4 COPIES OF THE FINAL APPLICATION PRIOR TO PUBLIC NOTICE.)	☒ YES ☐ NO
57a)	DOES THE APPLICATION CONTAIN TRADE SECRET INFORMATION?	☐ YES ☒ NO
b)	IF YES, HAS SUCH INFORMATION BEEN PROPERLY MARKED AND CLAIMED, AND TWO SEPARATE COPIES OF THE APPLICATION SUITABLE FOR PUBLIC INSPECTION BEEN SUBMITTED, IN ACCORDANCE WITH APPLICABLE REGULATIONS?	☐ YES ☐ NO
58)	DOES THE APPLICATION INCLUDE AN EARLY REDUCTION DEMONSTRATION FOR HAZARDOUS AIR POLLUTANTS (HAP) PURSUANT TO SECTION 112(i)(5) OF THE CLEAN AIR ACT AS AMENDED IN 1990?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
59)	DOES THE APPLICATION INCLUDE A PROPOSED DETERMINATION OF MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT) FOR HAZARDOUS AIR POLLUTANTS PURSUANT TO SECTION 112 OF THE CLEAN AIR ACT AS AMENDED IN 1990?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
60)	HAS THE APPLICANT REGISTERED A RISK MANAGEMENT PROGRAM FOR ACCIDENTAL RELEASES PURSUANT TO SECTION 112(r) OF THE CLEAN AIR ACT AS AMENDED IN 1990 OR INTENDS TO COMPLY WITH THIS REQUIREMENT IN ACCORDANCE WITH ITS COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
61a)	FOR CAAPP PERMIT RENEWALS, DOES THE APPLICATION INCLUDE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
b)	FOR SIGNIFICANT MODIFICATIONS AND INITIAL CAAPP APPLICATIONS SUBMITTED AFTER APRIL 20, 1998, DOES THE APPLICATION INCLUDE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64 FOR EMISSION UNITS WITH POST-CONTROL EMISSIONS GREATER THAN OR EQUAL TO THE MAJOR SOURCE THRESHOLD?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
62)	FOR SIGNIFICANT MODIFICATIONS, DOES THE APPLICATION INCLUDE A DESCRIPTION OF THE PROPOSED CHANGE(S), INCLUDING ALL PHYSICAL CHANGES IN EQUIPMENT, CHANGES IN THE METHOD OF OPERATION, CHANGES IN EMISSIONS, AND ANY NEW APPLICABLE REQUIREMENTS WHICH WILL APPLY AS A RESULT OF THE PROPOSED CHANGE?	☒ YES ☐ NO

NOTE: ANSWERING "NO" TO ANY OF THE ABOVE (ITEMS 43-62, EXCEPT ITEM 57a) MAY RESULT IN THE APPLICATION BEING DEEMED INCOMPLETE.

63)	DOES THE APPLICATION REQUEST TO UTILIZE THE OPERATIONAL FLEXIBILITY PROVISIONS AND INCLUDE THE INFORMATION REQUIRED FOR SUCH USE?	☐ YES ☒ NO
64a)	DOES THE APPLICANT HEREBY REQUEST A PERMIT SHIELD FOR THE ENTIRE SOURCE?	☐ YES ☒ NO
b)	IF NO, DOES THE APPLICATION CONTAIN A REQUEST FOR A PERMIT SHIELD FOR SPECIFIC ITEMS ONLY, IN ACCORDANCE WITH THE INSTRUCTIONS FOR A CAAPP PERMIT?	☐ YES ☒ NO
65)	DOES THE APPLICATION INCLUDE A COMPLETED "LISTING OF INSIGNIFICANT ACTIVITIES" FORM 297-CAAPP?	☐ YES ☒ NO
66)	DOES THE APPLICATION INCLUDE A DRAWING PROVIDING THE SOURCE LAYOUT? IF NO, PLEASE NOTE THAT THE ILLINOIS EPA MAY REQUEST SUCH A DRAWING UPON DETAILED REVIEW OF THE APPLICATION.	☐ YES ☒ NO

67) WHY IS THE APPLICANT APPLYING FOR A CAAPP PERMIT (CHECK ALL THAT APPLY)?

☐ THE POTENTIAL TO EMIT ONE OR MORE AIR POLLUTANTS FOR THE SOURCE IS 100 TONS/YEAR OR GREATER.

☐ THE SOURCE IS AN AFFECTED SOURCE FOR ACID RAIN DEPOSITION.

☐ THE POTENTIAL TO EMIT VOM IS 25 TONS/YEAR OR MORE AND THE SOURCE IS LOCATED IN ONE OF THE FOLLOWING CHICAGO AREA COUNTIES OR TOWNSHIPS:

- COOK COUNTY
- DUPAGE COUNTY
- KANE COUNTY
- LAKE COUNTY
- McHENRY COUNTY
- WILL COUNTY
- AUX SABLE TOWNSHIP, GRUNDY COUNTY
- GOOSE LAKE TOWNSHIP, GRUNDY COUNTY
- OSWEGO TOWNSHIP, KENDALL COUNTY

NOTE: THE U. S. EPA HAS APPROVED AN EXEMPTION ON NITROGEN OXIDES (NOx) EMISSIONS AS AN OZONE PRECURSOR IN THE CHICAGO OZONE NON-ATTAINMENT AREA. THEREFORE THE MAJOR SOURCE THRESHOLD FOR NOx EMISSIONS IS 100 TONS/YEAR UNTIL THIS EXEMPTION IS NO LONGER EFFECTIVE. SHOULD THE CURRENT NOx EXEMPTION BE NO LONGER EFFECTIVE, THE MAJOR SOURCE THRESHOLD FOR NOx EMISSIONS WILL BE 25 TONS/YEAR IN THE ABOVE CHICAGO AREA COUNTIES AND TOWNSHIPS.

☐ THE POTENTIAL TO EMIT AN INDIVIDUAL HAZARDOUS AIR POLLUTANT IS 10 TONS/YEAR OR MORE, OR THE POTENTIAL TO EMIT ALL SOURCE WIDE HAZARDOUS AIR POLLUTANTS IS 25 TONS/YEAR OR MORE, OR MEETS AN APPLICABLE LOWER THRESHOLD.

☐ THE SOURCE CONTAINS EQUIPMENT OR OPERATIONS SUBJECT TO CERTAIN USEPA EMISSION STANDARDS (NSPS AND NESHAP) FOR WHICH USEPA REQUIRES A CAAPP PERMIT.

68a) ARE ACTUAL EMISSIONS OF THE SOURCE BELOW THE APPLICABILITY LEVELS FOR A CAAPP PERMIT?	☒ YES	☐ NO
b) DOES THE APPLICATION CONTAIN PROPOSED PERMIT LIMITATIONS THAT WILL CONSTRAIN THE EMISSIONS AND PRODUCTION OR OPERATION OF THE SOURCE SUCH THAT POTENTIAL EMISSIONS OF THE SOURCE WILL FALL BELOW THE LEVELS FOR WHICH A CAAPP PERMIT IS REQUIRED?	☒ YES	☐ NO
c) DOES THE APPLICANT HEREBY REQUEST A FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CONSTRAINING THE EMISSIONS AND PRODUCTION OR OPERATION OF THE SOURCE SUCH THAT POTENTIAL EMISSIONS WOULD FALL BELOW APPLICABILITY LEVELS AND THEREBY EXCLUDE THE SOURCE FROM REQUIRING A CAAPP PERMIT?	☐ YES	☒ NO

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

69) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY:

AUTHORIZED SIGNATURE

Eastern Regional Manager - Milling

TITLE OF SIGNATORY

Dean Hughes

TYPED OR PRINTED NAME OF SIGNATORY

4 / 21 / 2011

DATE

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation:
_____

APPLICATION FOR MODIFICATION TO A CAAPP PERMIT

(CHECK ONLY ONE)

☐ SIGNIFICANT MODIFICATION

☐ MINOR MODIFICATION

FOR AGENCY USE ONLY
ID NO.:
PERMIT NO.:
DATE:

SECTION ONE — SOURCE INFORMATION

1) SOURCE NAME:

2) SOURCE ID NO.:

3) DATE FORM PREPARED: / /

SECTION TWO — INSTRUCTIONS IN BRIEF

1) COMPLETE THE FOLLOWING FORM WHEN APPLYING FOR A SIGNIFICANT OR MINOR MODIFICATION.

2) PROVIDE COMPLETED FORMS FOR THE AGENCY TO USE TO NOTIFY USEPA AND AFFECTED STATES AS REQUIRED UNDER SUBSECTIONS 8 AND 9 OF 39.5 OF THE ENVIRONMENTAL PROTECTION ACT. (COMPLETION OF THIS FORM FULFILLS THIS REQUIREMENT.)

3) FOR A CHANGE TO A COMBINED TITLE I/CAAPP PERMIT USING THE TITLE I/TITLE V PERMIT PROCESS, A SIGNIFICANT OR MINOR MODIFICATION REQUEST THAT WILL REVISE EXISTING APPLICABLE PERMIT CONDITIONS, A *T1R REQUEST*, OR ESTABLISH NEW CONDITIONS, A *T1N REQUEST*, WILL ADDITIONALLY NEED TO INCLUDE WITH THIS REQUEST A COMPLETED "REQUEST FOR A TITLE 1 INCORPORATION INTO THE CAAPP: T1, T1 REVISED (T1R), AND/OR T1 NEW (T1N)" FORM 283-CAAPP.

4) A SIGNIFICANT MODIFICATION REQUEST WILL REQUIRE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64 FOR EMISSION UNITS WITH POST-CONTROL EMISSIONS GREATER THAN OR EQUAL TO THE MAJOR SOURCE THRESHOLD.

5) THE APPLICATION SHOULD INCLUDE A DESCRIPTION OF THE PROPOSED CHANGE(S), ANY PHYSICAL CHANGES IN EQUIPMENT, CHANGES IN THE METHOD OF OPERATION, CHANGES IN EMISSIONS, AND ANY NEW APPLICABLE REQUIREMENTS WHICH WILL APPLY AS A RESULT OF THE PROPOSED CHANGE.

6) TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE THIS FORM FOR A SIGNIFICANT MODIFICATION. TO DECREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES COMPLETE A 273-CAAPP "REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT".

7) REFER TO 271-CAAPP INSTRUCTIONS FOR FURTHER GUIDANCE ON COMPLETING THIS FORM.

RECEIVED
MAY 12 2011
Illinois Environmental Protection Agency
BUREAU OF AIR
STATE OF ILLINOIS

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____ (AUTHORIZED SIGNATURE) Eastern Region Manager (TITLE OF SIGNATORY)

Dean Hughes (TYPED OR PRINTED NAME OF SIGNATORY) 4/29/11 (DATE)

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

APPLICATION PAGE _____

SECTION THREE	MODIFICATION INFORMATION		
	PERMIT MODIFICATION RATIONALE		
	WHY IS THE APPLICANT APPLYING FOR A MODIFICATION? (CHECK ALL THAT APPLY)	YES	NO
1)	THE APPLICANT REQUESTS TO CHANGE A CURRENT TITLE 1 LIMIT OR OTHER LIMIT.	☐	☐
2)	THE APPLICANT REQUESTS TO INCORPORATE A NEW OR MODIFIED RULE.	☐	☐
3)	THE APPLICANT REQUESTS TO INCORPORATE A CONSTRUCTION PERMIT.	☐	☐
4)	THE APPLICANT REQUESTS TO CHANGE PERMIT REQUIRMENTS (E.G., MONITORING, RECORDKEEPING, REPORTING, ETC.).	☐	☐
5)	THE APPLICANT REQUESTS TO INCREASE PERMITTED EMISSION LEVELS FOR FEE PURPOSES.	☐	☐
6)	THE APPLICANT REQUESTS TO MODIFY A COMPLIANCE PROCEDURE.	☐	☐
7)	OTHER (DESCRIBE):	☐	☐
	FOR MINOR PERMIT MODIFICATION		
	IF REQUESTING A MINOR PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
8)	WOULD THE REQUEST VIOLATE ANY APPLICABLE REQUIREMENT?	☐	☐
9)	WOULD THE REQUEST INVOLVE SIGNIFICANT CHANGES TO EXISTING MONITORING, REPORTING, OR RECORDKEEPING REQUIREMENTS IN THE PERMIT?	☐	☐
10)	WOULD THE REQUEST REQUIRE A CASE-BY-CASE DETERMINATION OF AN EMISSION LIMITATION OR OTHER STANDARD, OR A SOURCE-SPECIFIC DETERMINATION OF AMBIENT IMPACTS, OR A VISIBILITY OR INCREMENT ANALYSIS?	☐	☐
11)	WOULD THE REQUEST SEEK TO ESTABLISH OR CHANGE A PERMIT TERM OR CONDITION FOR WHICH THERE IS NO CORRESPONDING UNDERLYING REQUIREMENT AND WHICH AVOIDS AN APPLICABLE REQUIREMENT TO WHICH THE SOURCE WOULD OTHERWISE BE SUBJECT?	☐	☐
12)	WOULD THE REQUEST BE A MODIFICATION UNDER ANY PROVISION OF TITLE I OF THE CLEAN AIR ACT?	☐	☐
13)	WOULD THE REQUEST BE REQUIRED TO BE PROCESSED AS A SIGNIFICANT MODIFICATION? NOTE: PURSUANT TO 39.5(14) PERMIT MODIFICATIONS, IF THE APPLICANT ANSWERED "YES" TO ANY OF THE ABOVE QUESTIONS 8-13, THE MODIFICATION IS NOT CONSIDERED A MINOR PERMIT MODIFICATION AND WILL NEED TO BE SUBMITTED AS A SIGNIFICFANT MODIFICATION, PROCEED TO QUESTIONS 18-22.	☐	☐
	DOES THE MINOR PERMIT MODIFICATION APPLICATION INCLUDE THE FOLLOWING:		
14)	A DESCRIPTION OF THE CHANGE, THE EMISSIONS RESULTING FROM THE CHANGE, AND ANY NEW APPLICABLE REQUIREMENTS THAT WILL APPLY IF THE CHANGE OCCURS?	☐	☐
15)	THE SOURCE'S SUGGESTED DRAFT PERMIT (E.G., REDLINE, TRACKED CHANGES VERSION)?	☐	☐
16)	A CERTIFICATION BY A RESPONSIBLE OFFICIAL THAT THE PROPOSED MODIFICATION MEETS THE CRITERIA FOR USE OF MINOR PERMIT MODIFICATION PROCEDURES (E.G., THE SIGNATURE AT THE TOP OF THIS FORM)?	☐	☐
17)	UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION REQUEST, WILL THE SOURCE COMPLY WITH BOTH THE APPLICABLE REQUIREMENTS GOVERNING THE CHANGE AND THE PROPOSED PERMIT TERMS AND CONDITIONS? NOTE: UNTIL THE ILLINOIS EPA TAKES ACTION ON THE MINOR PERMIT MODIFICATION, THE SOURCE NEED NOT COMPLY WITH THE EXISTING PERMIT TERMS AND CONDITIONS IT SEEKS TO MODIFY.	☐	☐
	FOR SIGNIFICANT PERMIT MODIFICATION		
	IF REQUESTING A SIGNIFICANT PERMIT MODIFICATION, ANSWER YES OR NO TO EACH THE FOLLOWING QUESTIONS.	YES	NO
18)	THE PERMIT MODIFICATION WOULD NOT QUALIFY AS EITHER MINOR PERMIT MODIFICATION OR AS ADMINISTRATIVE PERMIT AMENDMENTS?	☐	☐
19)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WILL REQUIRE A SIGNIFICANT CHANGE IN EXISTING MONITORING TERMS OR CONDITIONS?	☐	☐
20)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION FOR A RELAXATION OF REPORTING OR RECORDKEEPING REQUIREMENTS?	☐	☐
21)	DOES THE APPLICANT REQUEST A SIGNIFICANT PERMIT MODIFICATION WHICH WOULD REQUIRE DECISIONS TO BE MADE ON TECHNICALLY COMPLEX ISSUES?	☐	☐
22)	IF A MODIFICATION CHANGES OR EFFECTS PREVIOUSLY SUBMITTED INFORMATION (E.G., ALTERING ESTABLISHED MONITORING), DOES THIS APPLICATION INCLUDE A REVISED 200-CAAPP AND OTHER ASSOCIATED DATA OR FORMS NEEDED TO DOCUMENT THE REQUEST?	☐	☐

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation:
_____

FEE DETERMINATION FOR CAAPP SOURCE

FOR AGENCY USE ONLY
ID NO.:
PERMIT NO.:
DATE:

SECTION ONE — SOURCE INFORMATION

1) SOURCE NAME:

2) SOURCE ID NO.:

3) DATE FORM PREPARED: / /

SECTION TWO — INSTRUCTIONS IN BRIEF

1) COMPLETE THIS FORM TO DETERMINE THE PERMIT FEE ESTABLISHED BY THE CAAPP PERMIT.

2) THE EMISSION LEVELS STATED IN SECTION FOUR, WHICH ARE ONLY USED FOR THE PURPOSE OF PERMIT FEE DETERMINATION, WILL BECOME PERMIT SPECIAL CONDITIONS IN THE CAAPP PERMIT.

3) THE ILLINOIS EPA DOES NOT REQUIRE PAYMENT WITH THIS APPLICATION. WHEN YOU ARE BILLED MAKE CHECK OR MONEY ORDER PAYABLE TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. SEND TO THE ADDRESS AT THE TOP OF THIS FORM. **DO NOT SEND CASH**. ON THE CHECK MEMO LINE, PLEASE LIST "CAAPP OPERATING PERMIT FEE: ID NO. XXXXXXXXX", REPLACE THE Xs WITH YOUR SOURCE ID NUMBER.

SECTION THREE — FEE RATIONALE

WHAT IS THE PERMIT STATUS AT THE TIME OF THIS REQUEST? CHECK ONLY ONE BELOW.

1) ☐ INITIAL CAAPP PERMIT ☐ RENEWAL CAAPP PERMIT ☐ FESOP INITIAL/RENEWAL
☐ SIGNIFICANT MODIFICATION ☐ MINOR MODIFICATION ☐ ADMINISTRATIVE AMENDMENT

2) COMPLETE THE BELOW TABLE FOR A NON-INITIAL CAAPP PERMIT. IF THERE IS AN INCREASE/DECREASE IN EMISSIONS, ENTER THE NUMBER(S) FOR THE EMISSIONS CHANGE RATIONALE AS APPROPRIATE.

POLLUTANT	INCREASE	DECREASE	NO CHANGE	EMISSIONS CHANGE RATIONALE(S)		
NITROGEN OXIDES (NO_X)	☐	☐	☐			
PARTICULATE MATTER (PART)	☐	☐	☐			
SULFUR DIOXIDE (SO_2)	☐	☐	☐			
VOLATILE ORGANIC MATERIAL (VOM)	☐	☐	☐			
OTHER (SPECIFY)	☐	☐	☐			
OTHER (SPECIFY)	☐	☐	☐			

CHANGE RATIONALE:
1 BUSINESS DECISION (E.G., OPERATING NEEDS, BANKRUPTCY, ETC.).
2 REMOVAL OR ADDITION OF PROCESSES AT THE SOURCE.
3 INCLUSION OR REMOVAL OF A CONTROL DEVICE.
4 CHEMICAL REFORMULATION (E.G., REFORMULATING A COATING FROM HIGH VOM TO A LOW VOM).
5 FUEL SWITCHING (E.G., COAL TO NATURAL GAS, ETC.).
6 METHODOLOGY CHANGE (E.G., SWITCHING A PETROLEUM SOLVENT TO AQUEOUS SOLUTION).
7 CHANGES IN METHOD USED FOR CALCULATIONS (E.G., EMISSION FACTOR CHANGE).
8 OTHER (DESCRIBE): _____
9 OTHER (DESCRIBE): _____

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BUREAU OF AIR
STATE OF ILLINOIS

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

FOR APPLICANT'S USE
_____

APPLICATION PAGE _____

SECTION FOUR **FEE DATA**

1) WILL THE SOURCE PAY THE CURRENT MAXIMUM FEE OF $250,000.00 PER YEAR? ☐ YES

IF YES, THE REMAINDER OF THIS FORM DOES NOT NEED TO BE COMPLETED. ☐ NO

2) EMISSION UNIT [A]	NITROGEN OXIDES (NO_X) (TONS/YR)	PARTICULATE MATTER (PART) (TONS/YR)	SULFUR DIOXIDE (SO_2) (TONS/YR)	VOLATILE ORGANIC MATERIAL (VOM) (TONS/YR)	OTHER [B] SPECIFY _____ (TONS/YR)
3) SUBTOTAL					
4) FUGITIVE					
5) TOTAL					

6) GRAND TOTAL ACROSS POLLUTANTS (TONS/YR):	
7) CALCULATED PERMIT FEE: IF GRAND TOTAL IN ITEM 6 ABOVE IS > 100 TONS/YR THEN MULTIPLY GRAND TOTAL BY $18.00 AND ENTER, OTHERWISE ENTER $1,800.00:	
8) MINIMUM PERMIT FEE IS $1,800.00 PER YEAR. MAXIMUM PERMIT FEE IS $250,000.00 PER YEAR. IF THE CALCULATED PERMIT FEE IN ITEM 7 ABOVE IS BETWEEN THESE TWO FEE AMOUNTS THEN ENTER HERE, OTHERWISE ENTER THE MINIMUM OR MAXIMUM PERMIT FEE, WHICHEVER IS APPLICABLE. THIS IS THE ACTUAL ANNUAL PERMIT FEE:	

A EMISSION UNIT - PROVIDE THE NAME AND FLOW DIAGRAM DESIGNATION OF THE EMISSION UNIT AS IT APPEARS ON THE DATA AND INFORMATION FORM.

B OTHER - ANY HAZARDOUS AIR POLLUTANT (HAP) NOT INCLUDED ELSEWHERE, E.G., CHLORINE, HCl, ETC.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

SUPPLEMENT TO CAAPP APPLICATION

FOR AGENCY USE ONLY
ID NUMBER:
PERMIT #:
DATE:

THIS FORM SHALL ACCOMPANY ANY SUPPLEMENT TO A CAAPP APPLICATION, THAT IS, ANY SUBMITTAL OF NEW OR CORRECTED INFORMATION FOR A PENDING CAAPP APPLICATION.

SOURCE INFORMATION

1) SOURCE NAME: Bunge North America, Inc.

2) DATE FORM PREPARED: April 20, 2011

3) SOURCE ID NO. (IF KNOWN): 183020ABT

SUPPLEMENT INFORMATION

4) DOES THIS SUPPLEMENT PROVIDE ADDITIONAL INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF NEW PAGES IN THIS SUPPLEMENT: 7

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	NEW PAGE #(S)
Bran Four Improvement in Yield (BFI)	PEUG2	1 to 7 BFI

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

APPLICATION PAGE 10 BFI

5) DOES THIS SUPPLEMENT CORRECT PREVIOUSLY SUBMITTED INFORMATION?

IF YES, COMPLETE THE FOLLOWING: ☒ YES ☐ NO

NUMBER OF REVISED PAGES IN THE SUPPLEMENT: 17

EMISSION UNIT, EQUIPMENT, OR SUBJECT THAT THIS SUPPLEMENT ADDRESSES	UNIT DESIGNATION	OLD PAGE #(S)	NEW PAGE #(S)
Bran Four Improvement in Yield (BFI)	PEUG2		8 - 24 BFI

SIGNATURE BLOCK

6) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION, AS AMENDED BY THIS SUPPLEMENT, ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____ (AUTHORIZED SIGNATURE)

Eastern Regional Manager - Milling (TITLE OF SIGNATORY)

Dean Hughes (TYPED OR PRINTED NAME OF SIGNATORY)

4 / 21 / 2011 (DATE)

APPLICATION PAGE 11 BFI

Kras, Kim

From: Robert Henricks <Robert.Henricks@bunge.com>
Sent: Tuesday, October 4, 2011 1:11 PM
To: Bernoteit, Bob
Cc: Aric Silver
Subject: Bunge Danville FESOP

Bob, in follow-up of our conversation last week, I am trying to determine how much information you need for the FESOP application. It seems that the 200 and 210 with the 210 covering the parts of the 2008 Title V renewal application still valid, each construction permit issued since the 2008 TV application and a current emissions spreadsheet would suffice. What am I missing?

Robert Henricks, PE
PO Box 28500
11720 Borman Dr.
St. Louis, MO 63146
Phone: 314-292-2342
Fax: 314-292-4342
Cell: 314-409-5779
robert.henricks@bunge.com

" The 10 C's of employee engagement: Connect, Contribute, Clarity, Convey, Congratulate, Control, Career, Collaborate, Credibility & Confidence." G. Seijts & D. Crim

This message is intended only for the named recipient and may contain confidential, proprietary or legally privileged information. No confidentiality or privilege is waived or lost by any misdirected transmission. If you received this message in error, please notify us immediately by telephone at 314 292-2000 and immediately delete this message from your system. If you are not the intended recipient, you must not use, disclose, distribute or copy any part of this message.

Bernoteit, Bob

From: Bernoteit, Bob
Sent: Tuesday, October 04, 2011 1:20 PM
To: 'Robert Henricks'
Subject: RE: Bunge Danville FESOP

Bob,

You will need to provide the following to convert this application to a FESOP:

CAAPP-200 form;
CAAPP-292 form;
CAAPP-296 form;
CAAPP-299 form or a listing of emission units to be included in the permit;
Proposed emission limits and the corresponding production, throughput, material usage, or fuel usage limits.

In addition, according to the source's CAAPP permit, this source is currently subject to the MACT for Solvent Extraction for Vegetable Oil Production (40 CFR 63 Subpart GGGG). In order for us to be able to issue a FESOP to this source, you will have to certify to us that operation of the oil production processes has ceased.

Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

---

From: Robert Henricks [mailto:Robert.Henricks@bunge.com]
Sent: Tuesday, October 04, 2011 1:11 PM
To: Bernoteit, Bob
Cc: Aric Silver
Subject: Bunge Danville FESOP

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Kras, Kim

From: Bernoteit, Bob
Sent: Tuesday, October 4, 2011 1:20 PM
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Subject: RE: Bunge Danville FESOP

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CAAPP-292 form;
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Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

---

From: Robert Henricks [mailto:Robert.Henricks@bunge.com]
Sent: Tuesday, October 04, 2011 1:11 PM
To: Bernoteit, Bob
Cc: Aric Silver
Subject: Bunge Danville FESOP

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Kras, Kim

From: Robert Henricks <Robert.Henricks@bunge.com>
Sent: Tuesday, October 4, 2011 1:34 PM
To: Bernoteit, Bob
Subject: RE: Bunge Danville FESOP

Thanks, Bob.

Robert Henricks, PE
PO Box 28500
11720 Borman Dr.
St. Louis, MO 63146
Phone: 314-292-2342
Fax: 314-292-4342
Cell: 314-409-5779
robert.henricks@bunge.com

" The 10 C's of employee engagement: Connect, Contribute, Clarity, Convey, Congratulate, Control, Career, Collaborate, Credibility & Confidence." G. Seijts & D. Crim

"Bernoteit, Bob" ---10/04/2011 01:19:49 PM---Bob, You will need to provide the following to convert this application to a FESOP:

From: "Bernoteit, Bob" <Bob.Bernoteit@Illinois.gov>
To: Robert Henricks <Robert.Henricks@bunge.com>
Date: 10/04/2011 01:19 PM
Subject: RE: Bunge Danville FESOP

Bob,

You will need to provide the following to convert this application to a FESOP:

CAAPP-200 form;
CAAPP-292 form;
CAAPP-296 form;
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Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

From: Robert Henricks [mailto:Robert.Henricks@bunge.com]

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Cc: Aric Silver
Subject: Bunge Danville FESOP

Bob, in follow-up of our conversation last week, I am trying to determine how much information you need for the FESOP application. It seems that the 200 and 210 with the 210 covering the parts of the 2008 Title V renewal application still valid, each construction permit issued since the 2008 TV application and a current emissions spreadsheet would suffice. What am I missing?

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PO Box 28500
11720 Borman Dr.
St. Louis, MO 63146
Phone: 314-292-2342
Fax: 314-292-4342
Cell: 314-409-5779
robert.henricks@bunge.com

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217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
321 East North Street
Danville, Illinois 61832

Application No.: 11070017 I.D. No.: 183020ABT
Applicant's Designation: Date Received: July 13, 2011
Subject: Whole Grain Flour Project
Date Issued: October 11, 2011
Location: 321 East North Street, Danville, Vermillion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a whole grain flour project, including new and existing milling, sifting, and drying equipment as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit authorizes a whole grain flour project (affected project), as follows, in the dry corn mill (the affected mill), with the installation of assorted equipment and use of certain existing equipment to manufacture a new whole grain flour product from materials already handled at the mill:

   a. The project would involve new emission units including FTS/TAS Pneumatic Transfer, 105-03 Flour Pneumatic Transfer, and Pneumatic Transfer to Sifters, all controlled by the existing Blended Foods Baghouse; Pneumatic Transfer to Storage controlled by the existing North Roof Baghouse; and a Hammermill and Collection Hopper controlled by a new Hammermill Dust Collector.

   b. The project would involve new equipment that is enclosed and will have no direct emissions, including a new Mixer and Conditioner and Sifters.

   c. The project would use the existing 8-Grit Steam Tube Dryer, which would be modified to process the new product as emissions would be controlled by a new cyclone, rather than the existing baghouse.

   d. The project would also use existing emission units, including the 8-Grit Cooler, which would continue to be controlled by the existing Blended Foods Baghouse, and existing Final Product Storage Bins, which would continue to be controlled by the North Roof Baghouse.

e. There will also be an increase in operation of existing boilers with the project due to the increased steam demand for conditioning and drying the new product.

2a. This permit does not revise or relax any requirements for the affected mill, including applicable emission standards and associated requirements for monitoring, recordkeeping and reporting as identified in the Clean Air Act Permit Program (CAAPP) permit for the source, Permit 96020027, which shall continue to apply after construction of the affected project is completed.

b. The requirements that apply to the affected mill shall also apply to the new emission units and equipment that are part of the affected project.

3. This permit does not authorize an increase in the design capacity of the affected mill, i.e., the amount of material that can be processed by the mill, as a result of the affected project.

4a. i. This permit is issued based on negligible emissions from the FTS/TAS Pneumatic Transfer, 105-03 Flour Pneumatic Transfer, and Pneumatic Transfer to Silos. For this purpose, PM/PM_{10} emissions from these units, in total, shall not exceed 0.1 lbs/hour and 0.44 tons/year.

ii. This permit is issued based on negligible emissions from the Hammermill and Collection Hopper. For this purpose, PM/PM_{10} emissions from these units, in total, shall not exceed 0.1 lbs/hour and 0.44 tons/year.

iii. This permit is issued based on minimal emissions from the Pneumatic Transfer to Storage. For this purpose, PM/PM_{10} emissions shall not exceed 0.25 lbs/hour and 1.1 tons/year.

b. This permit is issued based on increases in annual emissions of from existing emission units (i.e., emission units that are not addressed by Conditions 4(a)) as determined in accordance with 40 CFR 52.21(r)(6) due to the affected project that are less than significant.

Note: The application indicates that the PM/PM_{10} emissions from the modified 8-Grit Dryer will not exceed 0.45 lbs/hour and 2.0 tons/year and the increases in emissions from the boilers at the source due to the affected project will not exceed 2.2 tons/year of NO_x and CO and 1,500 tons/year of CO_2e.

5. At all times, the Permittee shall maintain and operate the affected project, including associated control devices, in a manner consistent with good air pollution control practice for minimizing emissions.

6. Upon written request by the Illinois EPA, the Permittee shall promptly have testing for PM/PM_{10} emissions of the modified 8-Grit Dryer performed in accordance with Condition 7.3.7 of CAAPP Permit 96020027.

7. The Permittee shall fulfill the recordkeeping and reporting requirements of 40 CFR 52.21(r)(6) for the modified 8-Grit Dryer.

8. The Permittee may operate the affected project under this permit until its CAAPP permit is reissued to address this project.

If you have any questions on this, please call Kevin Hecht at 217/785-1705.

Edwin C. Bakowski, P.E. Date Signed: _____
Manager, Permit Section
Division of Air Pollution Control

ECB:KTH:jws

cc: Region 3

Kras, Kim

From: Robert Henricks <Robert.Henricks@bunge.com>
Sent: Thursday, October 27, 2011 3:20 PM
To: Bernoteit, Bob
Subject: RE: Bunge Danville FESOP

Thanks Bob. I am working on the application after a bit of travel. Thought adding a 210 may help reference the appropriate construction permits. I am including PM, PM10, CO, NOx, SO2 & VOM rolling 12 month limits. Do you need PM2.5 limits also?

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To: Robert Henricks <Robert.Henricks@bunge.com>
Date: 10/04/2011 01:19 PM
Subject: RE: Bunge Danville FESOP

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CAAPP-200 form;
CAAPP-292 form;
CAAPP-296 form;
CAAPP-299 form or a listing of emission units to be included in the permit;
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In addition, according to the source's CAAPP permit, this source is currently subject to the MACT for Solvent Extraction for Vegetable Oil Production (40 CFR 63 Subpart GGGG). In order for us to be able to issue a FESOP to this source, you will have to certify to us that operation of the oil production processes has ceased.

Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

From: Robert Henricks [mailto:Robert.Henricks@bunge.com]
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To: Bernoteit, Bob
Cc: Aric Silver
Subject: Bunge Danville FESOP

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Kras, Kim

From: Bernoteit, Bob
Sent: Thursday, October 27, 2011 3:22 PM
To: Robert Henricks
Subject: RE: Bunge Danville FESOP

Bob,

We do not currently need limits for PM2.5 to avoid Title V.

Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

---

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Date: 10/27/2011 03:21 PM
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R001080

CONFIDENTIAL

PERMIT REVIEW TRAVELER SHEET

CONFIDENTIAL

I.D. #	183020ABT	Source Name	Bunge Grain Milling Inc	Date Received	11-14-2011
Application #	96020027	Location	Danville	Date Opened	11-17-2011

Program	TITLE V	Type	TITLE V-FESOP	Title V Type	NEW

Flag	Date	Section	Contact	Expiration Date

Emissions(Tons/Year)	CO	NOX	PM	SO2	VOM	Total HAP	Highest Single HAP
Current Allowable Rates	343.21	261.23	209.49	1,299.57	1,671.04	460.495804	388.61 - HEXANE
Project/Total Increase							

Initial Completeness		Analyst	Unit Manager	Date of Determination	Application Complete?	
CAAPP Completeness	☐ N/A	RmB	RmB	11/29/2011	☐ Yes	☒ No
Fee Completeness	☐ N/A				☐ Yes	☐ No
Technical Completeness					☐ Yes	☐ No

Welcome Phone Call to Permit Applicant

Date	Contact Name	Telephone#	Was Additional Information Requested?

For Incomplete Applications Type of Letter Sent	Analyst	Unit Manager	Date Issued	Number of Items Requested (or Amount of Fee Requested)
Notice of Additional Fees:				$
Notice of Incompleteness(NOI)	RmB	RmB	11/29/2011	1
Request for Addditional Information(RAI)				
All Required Information Received?	☐ Yes	☐ No	Date Received	
Notice of Intent to Deny CAAPP				

Permit Processing		Analyst	Date	Unit Manager	Date
Draft Prepared for Unit Manager Review & Comments Returned to Analyst					
Final Draft Sent to Applicant for Comments					
Submitted to Word Processing					
Draft Permit to Community Relations	☐ N/A				
Public Comment Period Initiated					
Public Hearing Date	☐ N/A				
Public Comment Period Completed	☐ N/A				
45 Day USEPA Comment Period	☐ N/A				
USEPA Comments Received	☐ Yes ☐ No				
Responsiveness Summary Completed	☐ N/A				
Public Participation Completed					
Final Action (Fill in One)		**Analyst**	**Date**	**Unit Manager**	**Date**
☐ Permit Not Required					
☐ Grant					
☐ Deny					

Mail-Out				
	☐ District Office _____	☐ Public Participation List	☐ Cook County	☐ Health Dept _____
	☐ Enforcement _____	☐ Other _____	Init. _____	Date _____

Permit Electronically Sent to	Applicant	CES	DLC	Community Relations	USEPA	AQPS	FOS
Person Sending (Initials)							

BUNGE

Enhancing the Value of America's Harvest[SM]

183020ABT
96026027

Mr. Bob Bernoteit
Division of Air Pollution Control - Permit Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702

Re: FESOP Application
Bunge – Danville Facility
Source ID No. 183020ABT

Dear Mr. Bernoteit:

Please find enclosed two copies of our FESOP application. The issued FESOP will replace the current Title V permit. This application pertains to the current grain elevator and corn mill.

As was documented in the application for and in approval 10050056, the corn and soybean oil extraction facilities have ceased as has the operation of the COGEN (coal fired boiler with backup) facility. The undersigned certifies that the statements contained in this application are true, correct and current.

If you have any questions or require any further information please do not hesitate to contact Robert Henricks at (314) 292-2342 or by email at robert.henricks@bunge.com.

Sincerely,

Dean Hughes
Eastern Regional Manager – Milling

Enclosure: FESOP application in duplicate

RECEIVED
NOV 14 2011
Illinois Environmental Protection Agency
BUREAU OF AIR
STATE OF ILLINOIS

SUPPLEMENTAL INFORMATION

APC 200

In response to question 20 of APC 200, as of the submittal of this application there are three projects undergoing or pending construction for which approvals have been issued by the Bureau of Air. The projects are Whole Grain, Bran System Improvements and the Thru Stock Project. It is anticipated construction will be completed before the end of 2012. Therefore, the sources related to these projects are included in this application.

Limits:

Facility Total Emissions:

Emissions from and of operation of grain and dry bulk material handling and processing and support boiler operations shall not exceed the following limits:

Pollutant	Emissions - Tons/12 month rolling total
Particulate matter (PM)	82.7
Particulate matter (PM10)	58.8
Carbon Monoxide (CO)	63.4
Nitrogen Oxides (NOx)	39.0
Volatile Organic Material (VOM)	2.3

These limits are based on maximum material throughputs, standard emission factors (Table 9.9.1-1, AP-42, Fifth Edition, Volume I, Update 2003, May 2003 & Table 9.11.1-1, Ap-42, Fifth Edition, Volume I, Supplement A, November 1995 & Table 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998 & Tables 1.3-1 and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E Corrected, May 2010, design or measured exhaust flow rates of baghouses and cyclones and typical capture efficiencies for the fugitive source designs.

Support boiler Emissions:

i. Pursuant to 35 IAC, Chapter B, Subchapter c, emissions from the affected primary boiler shall not exceed the following standards, which apply on an hourly basis:

Pollutant	Standard	Limit
PM	35 IAC 212.206	0.10 lb/mmBtu*
SO_2	35 IAC 214.161(b)	0.3 lb/mmBtu*
CO	35 IAC 216.121	200 ppm, @ 50% excess air

ii. The short-term emissions of NO_X from the affected primary boiler shall not exceed the following limits:

	Limits			
	Gaseous Fuels		Liquid Fuels	
Pollutant	Lbs/Hr	Lbs/mmBtu	Lbs/Hr	lbs/mmBtu
NO_x	7.7	0.080	16.3	0.171

iii. Short-term emissions from the affected primary boiler shall not exceed the following limits:

Pollutant	Limits Lbs/Hour
CO	14.9
VOM	0.5
PM/PM_{10}	1.4
SO_2	2.9
Individual HAP[1]	0.25
Total HAP	0.5

[1] Individual HAP refers to individual pollutants, such as formaldehyde, benzene, toluene, hexane.

iv. Annual emissions from the affected primary boiler shall not exceed the following limits. These limits reflect information in the permit application.

Pollutant	Limits (Tons/Year)
NO_X	39.0
CO	63.4
VOM	2.4
PM/PM_{10}	1.5
SO_2	2.3
Individual HAP	1.2
Total HAP	2.4

v. Pursuant to 35 IAC, Chapter B, Subchapter c, emissions from the affected backup boiler shall not exceed the following standards, which apply on an hourly basis:

Pollutant	Standard	Limit
PM	35 IAC 212.206	0.10 lb/mmBtu*
SO_2	35 IAC 214.122(b)(2)	0.3 lb/mmBtu*
CO	35 IAC 216.121	200 ppm, @ 50% excess air

* Limit is applicable to emissions attributable to burning of liquid fuel.

vi. The short-term emissions of NO_x from the affected backup boiler shall not exceed the following limits:

	Limits			
	Gaseous Fuels		Liquid Fuels	
Pollutant	Lbs/Hr	Lbs/mmBtu	Lbs/Hr	Lbs/mmBtu
NO_x	2.7	0.097	4.0	0.144

vii. Short-term emissions from the affected backup boiler shall not exceed the following limits.

Pollutant	Limits Lbs/Hour
CO	2.3
VOM	0.2
PM/PM_{10}	0.7
SO_2	0.9
Individual HAP[1]	0.1
Total HAP	0.2

[1] Individual HAP refers to individual pollutants, such as formaldehyde, benzene, toluene, hexane.

viii. Annual emissions from the affected backup boiler shall not exceed the following limits.

Pollutant	Limits (ton/yr)
NO_x	14.6
CO	10.1
VOM	0.7
PM/PM_{10}	3.1
SO_2	1.9
Individual HAP	0.4
Total HAP	0.9

Production:

1. The throughput of the dry corn mill shall not exceed 100,000 bushels/day, monthly average.
2. The Permittee shall keep the following operation records for the dry corn mill:
   a. Throughput (bushels/day monthly average) based on the daily corn mill production input.
3. The combined usage of liquid fuels in the affected primary boiler and the associated backup boiler (PEU 7) shall not exceed 850,000 gallons per year.

Primary boiler:

Emission Unit	Description	Emission Control
Primary Boiler	Gas and liquid fuel-fired boiler, 96.6 mmBtu/hour rated heat input capacity B&W Model FM 1556, manufactured in 1967	Low-NO_x burner

Backup boiler:

Emission Unit	Description	Emission Control
Backup Boiler	Gas and liquid fuel-fired boiler 27.9 mmBtu/hour rated heat input capacity manufactured by Clayton in 2006	Low-NO_x Burner

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
PERMIT SECTION
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

APPLICATION FOR PERMIT (A)

☐ CONSTRUCT ☒ OPERATE

NAME OF EQUIPMENT TO BE CONSTRUCTED OR OPERATED: Corn Mill and Grain Elevator (B)

FOR AGENCY USE ONLY

I.D. NO.

PERMIT NO.

DATE

NOTE: THIS APPLICATION FORM IS ONLY FOR SOURCES NOT REQUIRED TO OBTAIN A FESOP OR CAAPP PERMIT PURSUANT SECTION 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT.

1a. NAME OF OWNER: Bunge North America, Inc.	2a. NAME OF OPERATOR: Bunge Milling, Inc.
1b. STREET ADDRESS OF OWNER: 11720 Borman Drive	2b. STREET ADDRESS OF OPERATOR: 321 East North Street
1c. CITY OF OWNER: St. Louis	2c. CITY OF OPERATOR: Danville
1d. STATE OF OWNER: MO / 1e. ZIP CODE: 63146	2d. STATE OF OPERATOR: IL / 2e. ZIP CODE: 61832

3a. NAME OF CORPORATE DIVISION OR PLANT: Bunge Milling, Inc.		3b. STREET ADDRESS OF EMISSION SOURCE: 321 East North Street		
3c. CITY OF EMISSION SOURCE: Danville	3d. LOCATED WITHIN CITY LIMITS: ☒ YES ☐ NO	3e. TOWNSHIP: Danville	3f. COUNTY: Vermilion	3g. ZIP CODE: 61832

4. ALL CORRESPONDENCE TO: (TITLE AND/OR NAME OF INDIVIDUAL) Dean Hughes	5. YOUR DESIGNATION FOR THIS APPLICATION: (C) FESOP
6. ADDRESS FOR CORRESPONDENCE: (CHECK ONLY ONE) ☐ OWNER ☒ OPERATOR ☐ EMISSION SOURCE	7. WHO IS THE PERMIT APPLICANT? ☐ OWNER ☒ OPERATOR

8. THE UNDERSIGNED HEREBY MAKES APPLICATION FOR A PERMIT AND CERTIFIES THAT THE STATEMENTS CONTAINED HEREIN ARE TRUE AND CORRECT, AND FURTHER CERTIFIES THAT ALL PREVIOUSLY SUBMITTED INFORMATION REFERENCED IN THIS APPLICATION REMAINS TRUE, CORRECT AND CURRENT. BY AFFIXING HIS/HER SIGNATURE HERETO THE UNDERSIGNED FURTHER CERTIFIES THAT HE/SHE IS AUTHORIZED TO EXECUTE THIS APPLICATION.

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Illinois Environmental Protection Agency
BUREAU OF AIR
STATE OF ILLINOIS

AUTHORIZED SIGNATURE(S): (D)

BY SIGNATURE: Dean Hughes — DATE: 11/09/11
TYPED OR PRINTED NAME OF SIGNER: Dean Hughes
TITLE OF SIGNER: Eastern Regional Manager - Milling

BY SIGNATURE — DATE
TYPED OR PRINTED NAME OF SIGNER
TITLE OF SIGNER

(A) THIS FORM IS TO PROVIDE THE ILLINOIS EPA WITH GENERAL INFORMATION ABOUT THE EQUIPMENT TO BE CONSTRUCTED OR OPERATED. THIS FORM MAY BE USED TO REQUEST A CONSTRUCTION PERMIT, AN OPERATING PERMIT, OR A JOINT CONSTRUCTION AND OPERATING PERMIT.

(B) ENTER THE GENERIC NAME OF THE EQUIPMENT TO BE CONSTRUCTED OR OPERATED. THIS NAME WILL APPEAR ON THE PERMIT WHICH MAY BE ISSUED PURSUANT TO THIS APPLICATION. THIS FORM MUST BE ACCOMPANIED BY OTHER APPLICABLE FORMS AND INFORMATION.

(C) PROVIDE A DESIGNATION IN ITEM 5 ABOVE WHICH YOU WOULD LIKE THE ILLINOIS EPA TO USE FOR IDENTIFICATION OF YOUR EQUIPMENT. YOUR DESIGNATION WILL BE REFERENCED IN CORRESPONDENCE FROM THIS AGENCY RELATIVE TO THIS APPLICATION. YOUR DESIGNATION MUST NOT EXCEED TEN (10) CHARACTERS. (*OPTIONAL*)

(D) THIS APPLICATION MUST BE SIGNED IN ACCORDANCE WITH 35 ILL. ADM. CODE 201.154 OR 201.159 WHICH STATES: "ALL APPLICATIONS AND SUPPLEMENTS THERETO SHALL BE SIGNED BY THE OWNER AND OPERATOR OF THE EMISSION SOURCE OR AIR POLLUTION CONTROL EQUIPMENT, OR THEIR AUTHORIZED AGENT, AND SHALL BE ACCOMPANIED BY EVIDENCE OF AUTHORITY TO SIGN THE APPLICATION."

IF THE OWNER OR OPERATOR IS A CORPORATION, SUCH CORPORATION MUST HAVE ON FILE WITH THE ILLINOIS EPA A CERTIFIED COPY OF A RESOLUTION OF THE CORPORATION'S BOARD OF DIRECTORS AUTHORIZING THE PERSONS SIGNING THIS APPLICATION TO CAUSE OR ALLOW THE CONSTRUCTION OR OPERATION OF THE EQUIPMENT TO BE COVERED BY THE PERMIT.

BILLING INFORMATION		10. CONTACT PERSON FOR APPLICATION: Robert Henricks	
9a. COMPANY NAME: Bunge Milling, INc.		11. CONTACT PERSON'S TELEPHONE NUMBER: 314-292-2342	
9b. STREET ADDRESS: 321 East North Street		12. CONTACT PERSON'S FACSIMILE NUMBER: 314-292-4342	
9c. CITY: Danville		13. FEDERAL EMPLOYER IDENTIFICATION NUMBER (FEIN): 37-061-14689	
9d. STATE: IL	9f. BILLING CONTACT PERSON: Mr Hughes	14. PRIMARY STANDARD INDUSTRIAL CLASSIFICATION (SIC) CATEGORY: Flour and other grain mill products	
9e. ZIP CODE: 61832	9g. CONTACT TELEPHONE NO.: (217) 443-9779	15. PRIMARY SIC NUMBER: 2041	16. TAXPAYER IDENTIFICATION NUMBER (TIN):

17. DOES THIS APPLICATION CONTAIN FORM 197-FEE, "CONSTRUCTION PERMIT APPLICATION FEE DETERMINATION?"
☐ YES ☒ NO

18. DOES THE APPLICATION CONTAIN A PLOT PLAN/MAP?
☐ YES ☒ NO
IF THE PLOT PLAN/MAP HAS PREVIOUSLY BEEN SUBMITTED, SPECIFY:
I. D. NO.: 183020ABT APPLICATION NUMBER 96020027
IS THE APPROXIMATE SIZE OF APPLICANT'S PREMISES LESS THAN 1 ACRE?
☐ YES ☒ NO IF "NO", SPECIFY 79.19 ACRES

19. DOES THE APPLICATION CONTAIN A PROCESS FLOW DIAGRAM(S) THAT ACCURATELY AND CLEARLY REPRESENTS CURRENT PRACTICE? ☒ YES ☐ NO

20. IS THE EMISSION UNIT COVERED BY THIS APPLICATION ALREADY CONSTRUCTED? ☒ YES ☐ NO
IF "YES", PROVIDE THE DATE CONSTRUCTION WAS COMPLETED:

21. IF THIS APPLICATION INCORPORATES BY REFERENCE A PREVIOUSLY GRANTED PERMIT(S), HAS FORM APC-210, "DATA AND INFORMATION-INCORPORATION BY REFERENCE" BEEN SUBMITTED? ☒ YES ☐ NO

APPLICATION FOR OPERATING PERMIT ONLY

22. DOES THE STARTUP OF AN EMISSION UNIT COVERED BY THIS APPLICATION PRODUCE AIR CONTAMINANT EMISSIONS IN EXCESS OF APPLICABLE STANDARDS?
☐ YES ☒ NO
IF "YES", HAS FORM APC-203, "OPERATION DURING STARTUP" BEEN COMPLETED FOR THIS UNIT?
☐ YES ☐ NO

23. DOES THIS APPLICATION REQUEST PERMISSION TO OPERATE AN EMISSION UNIT DURING MALFUNCTIONS OR BREAKDOWNS?
☐ YES ☒ NO
IF "YES", HAS FORM APC-204, "OPERATION DURING MALFUNCTION AND BREAKDOWN" BEEN COMPLETED FOR THIS UNIT?
☐ YES ☐ NO

24. IS AN EMISSION UNIT COVERED BY THIS APPLICATION SUBJECT TO A FUTURE COMPLIANCE DATE?
☐ YES ☒ NO
IF "YES", HAS FORM APC-202, "COMPLIANCE PROGRAM & PROJECT COMPLETION SCHEDULE" BEEN COMPLETED FOR THIS UNIT?
☐ YES ☐ NO

25. DOES THE SOURCE COVERED BY THIS APPLICATION REQUIRE AN EPISODE ACTION PLAN (REFER TO GUIDELINES FOR EPISODE ACTION PLANS)?
☒ YES ☐ NO

26. LIST AND IDENTIFY ALL FORMS, EXHIBITS, AND OTHER INFORMATION SUBMITTED AS PART OF THIS APPLICATION. INCLUDE THE PAGE NUMBERS OF EACH ITEM (ATTACH ADDITIONAL SHEETS IF NECESSARY):

200-apc page F1 & F2	
210-apc page F3	
292 CAAPP page F4 & F5	
296 CAAPP page F6 - F10	
299 CAAPP page F11	
CALCULATION SPREADSHEETS 16 PAGES	

TOTAL NUMBER OF PAGES

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
1021 NORTH GRAND AVENUE, EAST
SPRINGFIELD, ILLINOIS 62702

DATA AND INFORMATION INCORPORATION BY REFERENCE	

THIS FORM IS TO BE USED TO INCORPORATE OR TRANSFER INFORMATION FROM ONE PERMIT APPLICATION TO ANOTHER, INCLUDING THE TRANSFER OF INFORMATION FROM A CONSTRUCTION PERMIT APPLICATION INTO AN OPERATING PERMIT APPLICATION. THIS FORM SHOULD ACCOMPANY THE APPLICATION INTO WHICH INFORMATION IS TO BE TRANSFERRED.

1. NAME OF OWNER:	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER):	
Bunge North America, Inc.	Bunge Milling, Inc.	
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:	5. IDENTIFICATION NUMBER:
321 East North Street	Danville	183020ABT

6. APPLICATION NUMBER:	7. ☐ CONSTRUCTION ☒ OPERATION OF: Corn Mill & Grain Elevator
96020027	

8. SHOULD ALL INFORMATION IN THIS APPLICATION BE INCORPORATED BY REFERENCE OR TRANSFERRED?
☐ YES ☒ NO
IF "NO", LIST ITEMS TO BE INCORPORATED

9a. ITEM TO BE INCORPORATED:	b. PAGE:	c. FLOW DIAGRAM DESIGNATION (IF APPLICABLE):
Part 3.0 Insignificant activities	7-9	NA
Part 4.0 Significant Emission units, list modified per construction approvals listed below	10 - 18	NA

10. DOES THE DATA & INFORMATION DESCRIBING THESE ITEMS REMAIN TRUE, CORRECT, CURRENT, AND COMPLETE?
☐ YES ☒ NO
IF "NO", SUBMIT THE APPLICATION FORMS AND CLEARLY STATE THE DATA AND INFORMATION WHICH IS NO LONGER TRUE, CORRECT, CURRENT, AND COMPLETE.

11. APPLICATION NUMBER:	12. ☒ CONSTRUCTION ☐ OPERATION OF:

13. SHOULD ALL INFORMATION IN THIS APPLICATION BE INCORPORATED BY REFERENCE OR TRANSFERRED?
☒ YES ☐ NO
IF "NO", LIST ITEMS TO BE INCORPORATED

14a. ITEM TO BE INCORPORATED:	b. PAGE:	c. FLOW DIAGRAM DESIGNATION (IF APPLICABLE):
Application Number 04080007, issued September 10, 2004	1 - 3	NA
Application Number 06030003, issued June 23, 2006	1 - 5	NA
Application Number 10050056, issued November 30, 2010	1 - 17	NA
Application Number 11010018, issued March 22, 2011	1 - 2	NA
Application Number 11050002, issued August 1, 2011	1 - 2	NA
Application Number 11070017, issued October 11, 2011	1 - 3	NA

15. DOES THE DATA & INFORMATION DESCRIBING THESE ITEMS REMAIN TRUE, CORRECT, CURRENT, AND COMPLETE?
☒ YES ☐ NO
IF "NO", SUBMIT THE APPLICATION FORMS AND CLEARLY STATE THE DATA AND INFORMATION WHICH IS NO LONGER TRUE, CORRECT, CURRENT, AND COMPLETE.

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: _____ / _____ / _____
Page _____ of _____
Source Designation: _____

FEE DETERMINATION FOR CAAPP SOURCE

FOR AGENCY USE ONLY
ID NO.:
PERMIT NO.:
DATE:

SECTION ONE — SOURCE INFORMATION

1) SOURCE NAME: Bunge Milling, Inc.

2) SOURCE ID NO.: 183020ABT

3) DATE FORM PREPARED: 10/28/2011

SECTION TWO — INSTRUCTIONS IN BRIEF

1) COMPLETE THIS FORM TO DETERMINE THE PERMIT FEE ESTABLISHED BY THE CAAPP PERMIT.

2) THE EMISSION LEVELS STATED IN SECTION FOUR, WHICH ARE ONLY USED FOR THE PURPOSE OF PERMIT FEE DETERMINATION, WILL BECOME PERMIT SPECIAL CONDITIONS IN THE CAAPP PERMIT.

3) THE ILLINOIS EPA DOES NOT REQUIRE PAYMENT WITH THIS APPLICATION. WHEN YOU ARE BILLED MAKE CHECK OR MONEY ORDER PAYABLE TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. SEND TO THE ADDRESS AT THE TOP OF THIS FORM. **DO NOT SEND CASH**. ON THE CHECK MEMO LINE, PLEASE LIST "CAAPP OPERATING PERMIT FEE: ID NO. XXXXXXXXX", REPLACE THE Xs WITH YOUR SOURCE ID NUMBER.

SECTION THREE — FEE RATIONALE

WHAT IS THE PERMIT STATUS AT THE TIME OF THIS REQUEST? CHECK ONLY ONE BELOW.

1) ☐ INITIAL CAAPP PERMIT ☐ RENEWAL CAAPP PERMIT X FESOP INITIAL/RENEWAL
☐ SIGNIFICANT MODIFICATION ☐ MINOR MODIFICATION ☐ ADMINISTRATIVE AMENDMENT

2) COMPLETE THE BELOW TABLE FOR A NON-INITIAL CAAPP PERMIT. IF THERE IS AN INCREASE/DECREASE IN EMISSIONS, ENTER THE NUMBER(S) FOR THE EMISSIONS CHANGE RATIONALE AS APPROPRIATE.

POLLUTANT	INCREASE	DECREASE	NO CHANGE	EMISSIONS CHANGE RATIONALE(S)
NITROGEN OXIDES (NO_X)	☐	X	☐	
PARTICULATE MATTER (PART) PM10	☐	X	☐	
SULFUR DIOXIDE (SO_2)	☐	X	☐	
VOLATILE ORGANIC MATERIAL (VOM)	☐	X	☐	
OTHER (SPECIFY) n-Hexane	☐	X	☐	
OTHER (SPECIFY)	☐	☐	☐	

Removal of Processes at the Source

CHANGE RATIONALE:
1 BUSINESS DECISION (E.G., OPERATING NEEDS, BANKRUPTCY, ETC.).
2 REMOVAL OR ADDITION OF PROCESSES AT THE SOURCE.
3 INCLUSION OR REMOVAL OF A CONTROL DEVICE.
4 CHEMICAL REFORMULATION (E.G., REFORMULATING A COATING FROM HIGH VOM TO LOW VOM).
5 FUEL SWITCHING (E.G., COAL TO NATURAL GAS, ETC.).
6 METHODOLOGY CHANGE (E.G., SWITCHING A PETROLEUM SOLVENT TO AQUEOUS SOLUTION).
7 CHANGES IN METHOD USED FOR CALCULATIONS (E.G., EMISSION FACTOR CHANGE).
8 OTHER (DESCRIBE): _____
9 OTHER (DESCRIBE): _____

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THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

APPLICATION PAGE F4

FOR APPLICANT'S USE
_____

SECTION FOUR **FEE DATA**

1) WILL THE SOURCE PAY THE CURRENT MAXIMUM FEE OF $250,000.00 PER YEAR? ☐ YES X NO

IF YES, THE REMAINDER OF THIS FORM DOES NOT NEED TO BE COMPLETED.

2) EMISSION UNIT [A]	NITROGEN OXIDES (NO_X) (TONS/YR)	PARTICULATE MATTER (PART) (TONS/YR)	SULFUR DIOXIDE (SO_2) (TONS/YR)	VOLATILE ORGANIC MATERIAL (VOM) (TONS/YR)	OTHER [B] SPECIFY n-Hexane (TONS/YR)
PEUG1		20.5			
PEUG2		28.5			
PEUG6		8.3			
PEU 7	39.0	1.5	2.0	2.3	0.7
				Note: n-hexane is included in the VOC emissions	
3) SUBTOTAL	39.0	58.8	2.0	2.3	0.7
4) FUGITIVE	Included in the above				
5) TOTAL	39.0	58.8	2.0	2.3	0.7

6) GRAND TOTAL ACROSS POLLUTANTS (TONS/YR):	102.1
7) CALCULATED PERMIT FEE: IF GRAND TOTAL IN ITEM 6 ABOVE IS > 100 TONS/YR THEN MULTIPLY GRAND TOTAL BY $18.00 AND ENTER, OTHERWISE ENTER $1,800.00:	
8) MINIMUM PERMIT FEE IS $1,800.00 PER YEAR. MAXIMUM PERMIT FEE IS $250,000.00 PER YEAR. IF THE CALCULATED PERMIT FEE IN ITEM 7 ABOVE IS BETWEEN THESE TWO FEE AMOUNTS THEN ENTER HERE, OTHERWISE ENTER THE MINIMUM OR MAXIMUM PERMIT FEE, WHICHEVER IS APPLICABLE. THIS IS THE ACTUAL ANNUAL PERMIT FEE:	

A EMISSION UNIT - PROVIDE THE NAME AND FLOW DIAGRAM DESIGNATION OF THE EMISSION UNIT AS IT APPEARS ON THE DATA AND INFORMATION FORM.

B OTHER - ANY HAZARDOUS AIR POLLUTANT (HAP) NOT INCLUDED ELSEWHERE, E.G., CHLORINE, HCl, ETC.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: Bunge Milling, Inc.

COMPLIANCE CERTIFICATION

FOR AGENCY USE ONLY
ID NUMBER:
PERMIT #:
DATE:

AN APPLICATION FOR A CAAPP PERMIT MUST CONTAIN A CERTIFICATION OF COMPLIANCE SIGNED BY A RESPONSIBLE OFFICIAL. THIS FORM MUST BE SUBMITTED WITH THE ORIGINAL CAAPP PERMIT APPLICATION AND UPDATED ON AN ANNUAL BASIS.

SOURCE INFORMATION

1) SOURCE NAME: Bunge Milling, Inc.

2) DATE FORM PREPARED: October 28, 2011

3) SOURCE ID NO. (IF KNOWN): 183020ABT

4) CAAPP PERMIT NUMBER (IF KNOWN): 96020027

5) IS THIS THE FIRST SUBMITTAL OF THIS FORM? ☐ YES ☒ NO

IF NO, WHAT IS THE REPORTING PERIOD COVERED BY THIS FORM? 1 / 1 / 2011 TO: 11 / 04 / 2011

SOURCE COMPLIANCE INFORMATION

6) DOES THE SIGNATORY OF THIS FORM HEREBY CERTIFY THAT THE SOURCE IS IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? ☒ YES ☐ NO

IF NO, EXPLAIN:

7) PROVIDE THE SCHEDULE FOR SUBMISSION OF COMPLIANCE CERTIFICATION DURING THE PERMIT TERM, E.G. ONCE ANNUALLY IN JANUARY (NOTE THAT SUCH CERTIFICATION MUST BE SUBMITTED NO LESS FREQUENTLY THAN ANNUALLY):

Once annually in June

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BUREAU OF AIR
STATE OF ILLINOIS

8) INDICATE THE COMPLIANCE STATUS OF THE SOURCE WITH ANY APPLICABLE ENHANCED MONITORING AND COMPLIANCE CERTIFICATION REQUIREMENTS OF THE CLEAN AIR ACT, E.G., NO ENHANCED MONITORING REQUIRED AND IN COMPLIANCE WITH COMPLIANCE CERTIFICATION REQUIREMENTS:

NO ENHANCED MONITORING REQUIRED AND IN COMPLIANCE WITH COMPLIANCE CERTIFICATION REQUIREMENTS

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE

APPLICATION PAGE F6

EMISSION UNITS COMPLIANCE INFORMATION

9a) THE FOLLOWING EMISSION UNITS ARE IN COMPLIANCE WITH APPLICABLE REQUIREMENTS SUCH AS EMISSION STANDARDS, EMISSION CONTROL REQUIREMENTS, EMISSION TESTING, COURT REQUIREMENTS, WORK PRACTICES, OR ENHANCED MONITORING, BASED ON THE COMPLIANCE METHODS SPECIFIED BELOW (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-1):

EMISSION UNIT	APPLICABLE RULE	COMPLIANCE DETERMINATION METHOD
PEUG 1, 2 & 6	IAC212 Subpart A, B, K & S	Emission testing, housekee-
		ping and maintenance
PEUG 1	40 CFR Subpart A & DD	Initial compliance testing
PEUG 7 (boilers)	IAC212 Subpart A, B & E	Maintanance
	40 CFR Subpart A & Dc	Maintanance

9b) LIST THE EMISSION UNITS THAT WERE NOT IN CONTINUOUS COMPLIANCE SINCE THE LAST REPORTING PERIOD, AND THE REASON(S) FOR NONCOMPLIANCE (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-2.):

EMISSION UNIT	REASON(S) FOR NONCOMPLIANCE
None	

COMPLIANCE INFORMATION

10) SUMMARY OF METHODS USED TO DETERMINE COMPLIANCE:

a) DESCRIPTION OF TESTING METHODS USED TO DEMONSTRATE COMPLIANCE (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-3.):

Initial compliance demonstrations as applicable per 40 CFR Subpart DD.

10b) DESCRIPTION OF MONITORING PROCEDURES USED TO DEMONSTRATE COMPLIANCE, INCLUDING ANY ENHANCED MONITORING REQUIREMENTS OF THE ACT (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-4.):

1. Operations, inspections & maintanance program for process units and pollution control systems.
2. Monitor production throughput.

c) DESCRIPTION OF RECORDKEEPING USED TO DEMONSTRATE COMPLIANCE (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-5.):

1. Operations, inspections & maintanance program for process units and pollution control systems.
2. Monitor production throughput.

10d) DESCRIPTION OF REPORTING USED TO DEMONSTRATE COMPLIANCE (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-6.):

1. Annual emissions report.
2. Deviation and certification reports.
3. Initial compliance test reports.

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

11) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: _____ Eastern Regional Manager - Milling

AUTHORIZED SIGNATURE — TITLE OF SIGNATORY

Dean Hughes — 11 / 09 / 11

TYPED OR PRINTED NAME OF SIGNATORY — DATE

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE

Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation:
_____

LISTING OF SIGNIFICANT ACTIVITIES

FOR AGENCY USE ONLY

ID NO.:

PERMIT NO.:

DATE:

SECTION ONE — SOURCE INFORMATION

1) SOURCE NAME: Bunge Milling, Inc.

2) SOURCE ID NO.: 183020ABT

3) DATE FORM PREPARED: 11 / 04 / 2011

SECTION TWO — INSTRUCTIONS IN BRIEF

1) COMPLETE THE LISTING OF SIGNIFICANT ACTIVITIES AT THIS SOURCE. PROVIDE THE LISTING IN THE ORDER IN WHICH THE EMISSION UNIT(S) OR PROCESS(ES) ARE FOUND IN THE APPLICATION.

2) EMISSION UNITS MAY BE GROUPED BY ACTIVITY RATHER THAN INDIVIDUALLY LISTED (E.G., TANKS 1-5).

3) DO NOT INCLUDE INSIGNIFICANT ACTIVITIES IN THIS LISTING; PROVIDE THOSE ACTIVITIES IN THE 297-CAAPP-LISTING OF INSIGNIFICANT ACTIVITIES.

SECTION THREE — LISTING OF SIGNIFICANT ACTIVITIES

#	EMISSION UNIT OR PROCESS	AIR POLLUTION CONTROL EQUIPMENT
	See SOURCE LIST & MAXIMUM EMISSIONS INVENTORY Spreadsheet	

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

Bunge North America, Inc.
Danville, IL

9-Nov-11

Note: The maximum heat input at any one time will be the capacity of the main boiler. However, both boilers may be operated at any one time, say when one boiler is being brought on line and the other being taken off line.

PEU 7

MAIN BOILER - B&W FM 1556

Emission factors for natural gas combustion are from AP42, Tables 1.4-1,-2,-3, July 1998, except for NOx. The #1 boiler has a low NOx n-gas burner as of 2004.

Heat input/boiler	96.55 MBH - NG	SCC 1-02-006-02		NOx	67	ppm	0.08	lb/MMBtu	82	lb/MMCF	
	94.8 MBH - FO			CO	200	ppm	0.15	lb/MMBtu	154	lb/MMCF	

Boiler #1	Unit	PM (lb/unit)	PM10 (lb/unit)	PM2.5 (lb/unit)	SO2 (lb/unit)	NOx (lb/unit)	VOC (lb/unit)	CO (lb/unit)	Hexane (lb/unit)	Hg (lb/unit)	NH3 (lb/unit)
	million cu. ft. burned	1.9	7.6	1.9	0.6	82	5.5	154	1.8	2.60E-04	3.2

Natural gas usage	=	822.741	Million cu ft/year		max	basis	1028	Btu/cf	8760	hr/yr	
		68.6	Million cu ft/month				1565.337	cf/min	n gas	NOx	0.080 #/mmBtu
	=	511.3	Million cu ft/year	at typical	60	MBH	30,000	cf/min	maximum		
		42.6	Million cu ft/month				19,000	cf/min	typical		

	Fuel Use	PM	PM10	PM2.5	SO2	NOx	VOM	CO	Hexane	Hg	NH3
	Mcf/yr	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
	822.7	0.78	3.13	0.78	0.25	33.73	2.26	63.35	0.74	0.000107	1.32
		lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
		0.18	0.71	0.18	0.056	7.70	0.5	14.46	0.17	0.000024	0.30

Emission factors for fuel oil combustion taken from AP42, Tables 1.3-1 & -3, May 2010. SCC 1-02-005-02

Heat input	140,000 BTU/gal	0.03% S: sulfur content			NOx	134	ppm	0.17	lb/MMBtu	24	lb/M gal
					CO	200	ppm	0.16	lb/MMBtu	22	lb/M gal

	Unit	PM (lb/unit)	PM10 (lb/unit)	PM2.5 (lb/unit)	SO2 142S*lb/unit	NOx (lb/unit)	NMVOM (lb/unit)	CO (lb/unit)	Hexane (lb/unit)	Hg (lb/unit)	NH3 (lb/unit)
	1000 gal burned	2	2	0.25	4.26	24	0.34	22		1.13E-04	0.8

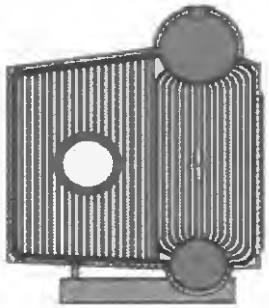
Fuel oil usage	=	850.000	1000 gal/yr	based on	7.472	weeks use at max capacity					
		455.0	1000 gal/mo								
		528.2	1000 gal/yr	at typical	60	MBH				NOx	0.171 #/mmBtu
		282.8	1000 gal/mo							PM	0.0143
										SO2	0.0304

	Fuel Use	PM	PM10	PM2.5	SO2	NOx	NMVOM	CO	Hexane	Hg	NH3
	1000 gal/yr	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
	850.000	0.85	0.85	0.11	1.81	10.20	0.14	9.35		0.000048	0.34
		lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
		1.4	1.4	0.17	2.9	16.3	0.2	14.90		0.000077	0.54
Maximum hourly rate: either NG or FO		1.4	1.4	0.18	2.9	16.3	0.5	14.90	0.17	0.000077	0.54
	Typical	0.84	0.84	0.11	1.79	10.10	0.32	9.26	0.11	0.000048	0.34

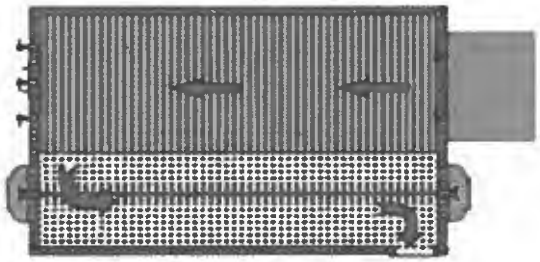
Main Boiler emissions		PM ton/year	PM10 ton/year	PM2.5 ton/year	SO2 ton/year	NOx ton/year	NMVOM ton/year	CO ton/year	Hexane ton/year	Hg ton/year	NH3 ton/year
	N-Gas	0.78	3.13	0.78	0.25	33.73	2.26	63.35	0.74	1.07E-04	1.32
	Fuel Oil	0.85	0.85	0.11	1.81	10.20	0.14	9.35	0.00	4.80E-05	0.34
	Annual Total	1.52	3.53	0.78	2.02	39.0	2.26	63.35	0.74	0.00014	1.47
	Typical	0.94	2.19	0.49	1.26	24.24	1.41	39.37	0.46	0.000087	0.91
Significant emission rates		25	15	10	40	40	40	100	10	NA	NA
Below sig em rate?		yes	yes	yes	yes	yes	yes	yes	yes	NA	NA

Note: When Fuel Oil pollutant hourly emission rate is greater than that for N-GAS, the annual Total is = Fuel Oil + N-GAS * (52-7.472)/52, since the Fuel Oil emissions are based on 7.472 weeks of operation at capacity on Fuel Oil. When the opposite is the case the Total = N-GAS total.

B&W D type



Vertical Cross Section



Horizontal Cross Section

CLAYTON BOILER

Emission factors for natural gas combustion are from AP42, Tables 1.4-1,-2,-3, March 03. SCC 1-02-006-02 and FIRE

452.267 cf/min n gas
6,000 cf/min maximum
6,000 cf/min typical

Heat input/boiler 27.89583 MBH
Number of boilers 1

Unit	PM (lb/unit)	PM10 (lb/unit)	PM 2.5 (lb/unit)	SO2 (lb/unit)	NOx (lb/unit)	VOM (lb/unit)	CO (lb/unit)	Hexane (lb/unit)	Hg (lb/unit)	NH3 (lb/unit)
million cu. ft. burned	1.9	7.6	1.9	0.6	100.0	5.5	84	1.8	2.60E-04	3.2

Natural gas usage = 237.712 Million cu ft/year max basis 1028 Btu/cf 8760 hr/yr
19.8 Million cu ft/month
= 9.1 Million cu ft/year at typical operation of 2 weeks/yr
9.1 Million cu ft/month

NOx 0.097 #/mmBtu

Steam

Fuel Use	PM	PM10	PM 2.5	SO2	NOx	VOM	CO	Hexane	Hg	NH3
Mcf/yr	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
237.7	0.23	0.90	0.23	0.071	11.9	0.65	9.98	0.214	0.000031	0.38
	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
	0.052	0.21	0.052	0.016	2.7	0.15	2.28	0.049	0.0000071	0.087

Emission factors for fuel oil combustion taken from AP42, Tables 1.3-1 & -3, May 2010. SCC 102005-02

Heat input 140,000 BTU/gal 0.03% S: sulfur content

	Unit	PM	PM10	PM2.5	SO2	NOx	NMVOM	CO	Hexane	Hg	NH3
		(lb/unit)	(lb/unit)	(lb/unit)	142S*lb/unit	(lb/unit)	(lb/unit)	(lb/unit)		(lb/unit)	(lb/unit)
	1000 gal burned	2.00	3.3	0.25	4.26	20	0.34	5.0		1.13E-04	0.8

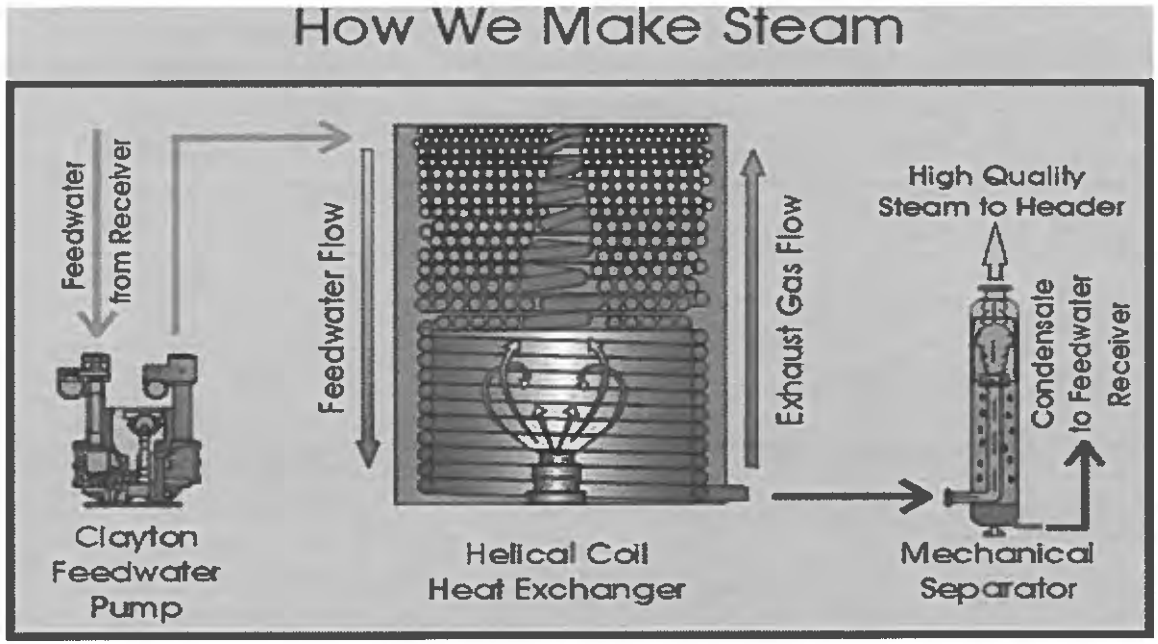
Fuel oil usage	=	850.000	1000 gal/yr	based on the total fuel oil limit for both boilers	25.392	weeks use at max capacity	
		145.5	1000 gal/mo	based on boiler capacity			
		66.9	1000 gal/yr	at typical operation of 2 weeks/yr		NOx	0.143 #/mmBtu
		66.9	1000 gal/mo			PM	0.0236
						SO2	0.0304

Fuel Use	PM	PM10	PM2.5	SO2	NOx	NMVOM	CO	Hexane	Hg	NH3
1000 gal/yr	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year		ton/year	ton/year
850.000	0.85	1.40	0.106	1.81	8.50	0.145	2.13		0.000048	0.340
	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr		lb/hr	lb/hr
	0.40	0.7	0.05	0.85	4.0	0.07	1.00		0.000023	0.16
Maximum	0.40	0.7	0.052	0.85	4.0	0.15	2.3	0.05	0.000023	0.16
Typical	0.052	0.21	0.052	0.016	2.71	0.15	2.3	0.05	0.0000071	0.087

Backup Boiler emissions	PM	PM10	PM2.5	SO2	NOx	NMVOM	CO	Hexane	Hg	NH3
	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
N-Gas	0.23	0.90	0.23	0.07	11.89	0.65	9.98	0.21	3.09E-05	0.38
Fuel Oil	0.85	1.40	0.11	1.81	8.50	0.14	2.13	0.00	4.80E-05	0.34
Annual Total	1.0	1.9	0.23	1.85	14.6	0.7	10.0	0.2	6.38E-05	0.38
Typical	0.0087	0.035	0.0087	0.0027	0.46	0.025	0.38	0.0082	0.0000012	0.015
Significant emission rates	25	15	10	40	40	40	100	10	NA	
Below sig em rate?	yes	yes	yes	yes	yes	yes	yes	yes	NA	

Note: When Fuel Oil pollutant hourly emission rate is greater than that for N-GAS, the Annual Total is = Fuel Oil + N-GAS * (52-25.392)/52, since the Fuel Oil emissions are based on 25.392 weeks of operation at capacity on Fuel Oil. When the opposite is the case the Annual Total = N-GAS total.

The following drawing shows a generic diagram of the boiler provided by Clayton Industries.



R001101

CAAPP/TITLE V FESOP COMPLETENESS REVIEW SHEET

Source Name: **Bunge North America, Inc.**

Source I.D.#: **183 020 ABT**

Application #: **96020027**

Date Received: **11-14-11**

Completeness Review Due Date: **12-27-11**

Previous Permit Expiration Date: _____

Type of Application: Initial New Renewal

1. Are questions 8-10 in Section 4 of CAAPP 200 all marked "yes"? YES NO
   No GAAPP 200 form – See notes on next page
   If yes, the only forms needed are 200, 292, 296 and 299

2. Does the source name on the application match the name in ICEMAN? YES NO
   If no, request forms 272 and 273 for ownership change

3. Does the signature in the certification blocks match the Responsible Official on the previous permit? If no, request a 273 or 500 if delegating authority. YES NO

4. Are there any VNs pending (search VN tracking database)? YES NO
   If yes, forward to CAAPP unit manager for review.

5. Is there trade secret/confidentiality claims made on the application? YES NO
   (Form 200, section 5, question27) If yes, forward to CAAPP unit manager for review.

6. Check for the following forms:
   - ☒ 200
   - ☐ 286
   - ☒ 299 (FESOP only)
   - ☒ 292
   - ☒ 296
   - ☐ 293
   - ☐ 464 (if a new application or first time renewal)
   - ☐ 287 (only if anything in Form 200, section 5 is marked "Incorporate by Reference" marked)

7. Are questions 1-6 in Section 5 of CAAPP 200 all marked "yes" or "Incorporate by Reference"? YES NO
   If no, information must be requested, see 9-15 of this sheet.

8. Is additional information needed? YES NO
   For CAAPPs - If yes, continue to #9-15. If no, skip to #16. If no, skip to #16.
   For FESOPs – Forward the entire application to the unit manager for additional review

9. Company contact person: **Robert Henricks**

10. Contact Email or Phone: **314/292-2342**

11. How was the source contacted? ☐ EMAIL ☐ PHONE Date of request? _____

12. Date forms are due back: _____ Date forms were received: _____
    If additional info not rec'd by the due date, send NOI

13. Date NOI sent: 11-30-11 Due Date: 12-15-11 (allow 15 days for response)

14. Date NOI response received: 12-5-11 Response not rec'd by completeness due date _____

15. Date renewal due: _____ Is the application timely? YES NO
    If no, send an email to CES and the CAAPP unit manager

16. If fees are due, send file to Lori Pennington for invoice. Date: _____

Init. Hendricks Called 12-2-11. Talked w/ B. Bernotat re: NOI

Administrative Reviewer: Linda Marr

Administratively Complete. Sent to CAAPP or FESOP unit manager on: 11-16-11

Preliminarily Incomplete. Sent to CAAPP or FESOP unit manager on: 11-29-11

CAAPP/FESOP Unit Manager: RLB Date: 11/29/201

Complete or Incomplete Make a phone call or email source (go to #9-15 on front page)

Send NOI for deficiencies noted on front page and the info listed below (Go to #14-15 on front page)

Date to Word Processing: N/A

Date Completeness Letter mailed: _____ Completeness Letter could not be sent _____

Additional Information Requested by the Administrative Reviewer	
1.	**200 CAAPP - source sent APC 200. Form will not be requested until Unit Mgr ok's**
2.	**There is no dollar amount listed on the 292 form. Do I need to get this info from the company?**
3.	
4.	There is a CAAPP 200 that was submitted in May, 2011
5.	Can I use this information for this application?

Additional Information Requested by the CAAPP or FESOP Unit Manager	
1.	
2.	
3.	
4.	
5.	

Attach a copy of all letters, additional information and emails received in chronological order (newest on the top) and place this packet on top of the application originally received and then place it all in the permit record.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR JOHN KIM, INTERIM DIRECTOR

217/785-5151

CERTIFIED MAIL
7008 1830 0001 4717 1718

NOTICE OF INCOMPLETENESS FOR CAAPP APPLICATION

APPLICANT

Bunge North America, Inc.
Attn: Dean Hughes
321 East North Street
Danville, Illinois 61832

Date of Determination:	November 30, 2011
Application/Permit No.:	96020027
I.D. Number:	183020ABT
Date Received:	November 14, 2011
Source Name:	Bunge Milling, Inc
Location of Source:	321 East North Street, Danville, Vermilion County

Dear Mr. Hughes:

This letter provides notification that your Clean Air Act Permit Program (CAAPP) application received on the date indicated above, has been determined by the Agency to be incomplete because it does not contain sufficient information pursuant to Section 39.5(5) of the Illinois Environmental Protection Act (Act) and 35 Ill. Adm. Code 270.303. The following information is needed before the application can be reevaluated for completeness:

- 200 CAAPP Form

Upon receipt of the requisite information, the Illinois EPA will resume processing the CAAPP application. The timeframe for processing the CAAPP application for this source based on any further submittals will begin on the date such information is received by the Illinois EPA. Please reference the application and I.D. numbers assigned above on all correspondence concerning this matter. Note that application forms may be obtained from our website at http://www.epa.state.il.us/air/forms.html.

If the owner or operator of the above-referenced source fails to submit a timely and complete CAAPP application by the date such application is due, as specified in 35 Ill. Adm. Code 270.201, such source shall lose the protection of the application shield.

If you have any questions regarding this matter, please contact the Division of Air Pollution Control Permit Section at 217/782-2113.

Sincerely,

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

ECB:RWB:lsm

cc: FOS, Region 3
Application File
Compliance & Systems Management Section

Kras, Kim

From: Pennington, Lori
Sent: Wednesday, November 16, 2011 8:28 AM
To: Reed, Michael; Bernoteit, Bob
Subject: Bunge FESOP Application

Expires: Monday, May 14, 2012 12:00 AM

I've received a FESOP application from the above company (ID#183020ABT). The Title V is currently open for renewal and assigned to Leeanne Kinsella. They've submitted a APC-200 form and a CAAPP-292 form.

Just to confirm.....I need to close out the renewal, and reopen the same permit # as a TV FESOP, correct? Please advise. Thanks!

Lori Pennington
Illinois EPA, Bureau of Air
Air Permit Section, Records Unit
(217)785-1720

Kras, Kim

From: Bernoteit, Bob
Sent: Wednesday, November 16, 2011 8:32 AM
To: Pennington, Lori; Reed, Michael
Subject: RE: Bunge FESOP Application

Lori,

I will defer your question to Mike about whether the Title V renewal needs to be closed. However, if they only submitted an APC-200 form and a 292-CAAPP form to request a FESOP, then I would like to have a Completeness Review done and have this application deemed to be incomplete.

I was contacted by this company regarding a FESOP application and I specifically advised them as to which forms to submit. It seems like they did not follow my instructions.

Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

---

From: Pennington, Lori
Sent: Wednesday, November 16, 2011 8:28 AM
To: Reed, Michael; Bernoteit, Bob
Subject: Bunge FESOP Application

I've received a FESOP application from the above company (ID#183020ABT). The Title V is currently open for renewal and assigned to Leeanne Kinsella. They've submitted a APC-200 form and a CAAPP-292 form.

Just to confirm.....I need to close out the renewal, and reopen the same permit # as a TV FESOP, correct? Please advise. Thanks!

Lori Pennington
Illinois EPA, Bureau of Air
Air Permit Section, Records Unit
(217)785-1720

Kras, Kim

From: Reed, Michael
Sent: Wednesday, November 16, 2011 9:51 AM
To: Pennington, Lori; Bernoteit, Bob
Subject: RE: Bunge FESOP Application

Lori,

Once a FESOP application has been deemed complete, then we can close out the renewal for a CAAPP and open the FESOP under the same permit#.

However, until the application is complete, it must remain a CAAPP application.

I will defer to Bob on the completeness of the application.

Michael T. Reed, CAAPP Unit Manager
Illinois Environmental Protection Agency
BOA/DAPC/Permit Section
1021 N. Grand Ave East
Springfield, Illinois 62794
Michael.Reed@illinois.gov
Office: 217.782.4651 | Fax 217.524.5023

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From: Pennington, Lori
Sent: Wednesday, November 16, 2011 8:28 AM
To: Reed, Michael; Bernoteit, Bob
Subject: Bunge FESOP Application

I've received a FESOP application from the above company (ID#183020ABT). The Title V is currently open for renewal and assigned to Leeanne Kinsella. They've submitted a APC-200 form and a CAAPP-292 form.

Just to confirm.....I need to close out the renewal, and reopen the same permit # as a TV FESOP, correct? Please advise. Thanks!

Lori Pennington
Illinois EPA, Bureau of Air
Air Permit Section, Records Unit
(217)785-1720

Kras, Kim

From: Marr, Linda
Sent: Tuesday, November 29, 2011 2:45 PM
To: Bernoteit, Bob
Subject: NOI for Bunge

I've never done a NOI. Where do I get the letter from? I've sent them out but never actually prepared one.

Linda Marr
Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1708 Phone
217/524-5023 Fax
Linda.Marr@illinois.gov

Please consider the environment before printing this e-mail

Kras, Kim

From: Bernoteit, Bob
Sent: Tuesday, November 29, 2011 3:43 PM
To: Marr, Linda
Subject: RE: NOI for Bunge

I will try to find one in the Letter Book.

Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

---

From: Marr, Linda
Sent: Tuesday, November 29, 2011 2:45 PM
To: Bernoteit, Bob
Subject: NOI for Bunge

I've never done a NOI. Where do I get the letter from? I've sent them out but never actually prepared one.

Linda Marr
Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1708 Phone
217/524-5023 Fax
Linda.Marr@illinois.gov

Please consider the environment before printing this e-mail

Kras, Kim

From: Bernoteit, Bob
Sent: Tuesday, November 29, 2011 3:56 PM
To: Marr, Linda
Subject: RE: NOI for Bunge
Attachments: 07070051.doc

Linda,

I found one. Please see the attached. Feel free to modify it based on what is missing from the application.

Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

---

From: Marr, Linda
Sent: Tuesday, November 29, 2011 2:45 PM
To: Bernoteit, Bob
Subject: NOI for Bunge

I've never done a NOI. Where do I get the letter from? I've sent them out but never actually prepared one.

Linda Marr
Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1708 Phone
217/524-5023 Fax
Linda.Marr@illinois.gov

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217/785-5151

CERTIFIED MAIL
7004-2510-0001-8647-9080

NOTICE OF INCOMPLETENESS FOR CAAPP APPLICATION

APPLICANT

Citation Oil & Gas Corp.
Attn: LeeAnn Elsom
8223 Willow Place South, Ste. 250
Houston, Texas 77070-5623

Date of Determination: August 7, 2007
Application/Permit No.: 07070051
I.D. Number: 121813AAA
Date Received: July 23, 2007
Source Name: Salem Unit
Location of Source: 2302 Hoots Chapel Road, Salem, Illinois 62870

Dear Ms. Elsom:

This letter provides notification that your Clean Air Act Permit Program (CAAPP) application received on the date indicated above, has been determined by the Agency to be incomplete because it does not contain sufficient information pursuant to Section 39.5(5) of the Illinois Environmental Protection Act (Act) and 35 Ill. Adm. Code 270.303.

The following information is needed before the application can be reevaluated for completeness:

200 form
292 form
293 form
296 form

Upon receipt of the requisite information, the Illinois EPA will resume processing the CAAPP application. The timeframe for processing the CAAPP application for this source based on any further submittals will begin on the date such information is received by the Illinois EPA. Please reference the application and I.D. numbers assigned above on all correspondence concerning this matter. Note that application forms may be obtained from our website at http://www.epa.state.il.us/air/forms.html.

If the owner or operator of the above-referenced source fails to submit a timely and complete CAAPP application by the date such application is due, as specified in 35 Ill. Adm. Code 270.201, such source shall lose the protection of the application shield.

If you have any questions regarding this matter, please contact the Division of Air Pollution Control Permit Section at 217/785-2113.

Sincerely,

Edwin C. Bakowski, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:MTR:YMC:lsm

cc: FOS, Region 3
Application File
Compliance & Systems Management Section

Kras, Kim

From: Marr, Linda
Sent: Tuesday, November 29, 2011 4:08 PM
To: Bernoteit, Bob
Subject: RE: NOI for Bunge

Thanks. I'll have it for you tomorrow.

From: Bernoteit, Bob
Sent: Tuesday, November 29, 2011 3:56 PM
To: Marr, Linda
Subject: RE: NOI for Bunge

Linda,

I found one. Please see the attached. Feel free to modify it based on what is missing from the application.

Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

---

From: Marr, Linda
Sent: Tuesday, November 29, 2011 2:45 PM
To: Bernoteit, Bob
Subject: NOI for Bunge

I've never done a NOI. Where do I get the letter from? I've sent them out but never actually prepared one.

Linda Marr
Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1708 Phone
217/524-5023 Fax
Linda.Marr@illinois.gov

Please consider the environment before printing this e-mail

Kras, Kim

From: Robert Henricks <Robert.Henricks@bunge.com>
Sent: Friday, December 2, 2011 12:03 PM
To: Bernoteit, Bob
Subject: FESOP fee

Bob, what is the annual fee for a FESOP facility? 251.201 says for a plant emission rate of 100 to <194 tpy the fee is $18/ton. Correct?

Robert Henricks, PE
PO Box 28500
11720 Borman Dr.
St. Louis, MO 63146
Phone: 314-292-2342
Fax: 314-292-4342
Cell: 314-409-5779
robert.henricks@bunge.com

" The 10 C's of employee engagement: Connect, Contribute, Clarity, Convey, Congratulate, Control, Career, Collaborate, Credibility & Confidence." G. Seijts & D. Crim

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Kras, Kim

From: Bernoteit, Bob
Sent: Friday, December 2, 2011 1:23 PM
To: Robert Henricks
Subject: RE: FESOP fee

Bob,

After January 1, 2012 the fee will become $21.50/ton.

Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

---

From: Robert Henricks [mailto:Robert.Henricks@bunge.com]
Sent: Friday, December 02, 2011 12:03 PM
To: Bernoteit, Bob
Subject: FESOP fee

Bob, what is the annual fee for a FESOP facility? 251.201 says for a plant emission rate of 100 to <194 tpy the fee is $18/ton. Correct?

Robert Henricks, PE
PO Box 28500
11720 Borman Dr.
St. Louis, MO 63146
Phone: 314-292-2342
Fax: 314-292-4342
Cell: 314-409-5779
robert.henricks@bunge.com

" The 10 C's of employee engagement: Connect, Contribute, Clarity, Convey, Congratulate, Control, Career, Collaborate, Credibility & Confidence." G. Seijts & D. Crim

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Kras, Kim

From: Robert Henricks <Robert.Henricks@bunge.com>
Sent: Friday, December 2, 2011 1:44 PM
To: Bernoteit, Bob
Subject: RE: FESOP fee

Thanks Bob. The 200CAAPP has been completed and forwarded to Danville for the signature. You should have it next week.

Robert Henricks, PE
PO Box 28500
11720 Borman Dr.
St. Louis, MO 63146
Phone: 314-292-2342
Fax: 314-292-4342
Cell: 314-409-5779
robert.henricks@bunge.com

" The 10 C's of employee engagement: Connect, Contribute, Clarity, Convey, Congratulate, Control, Career, Collaborate, Credibility & Confidence." G. Seijts & D. Crim

"Bernoteit, Bob" ---12/02/2011 01:23:19 PM---Bob, After January 1, 2012 the fee will become $21.50/ton.

From: "Bernoteit, Bob" <Bob.Bernoteit@Illinois.gov>
To: Robert Henricks <Robert.Henricks@bunge.com>
Date: 12/02/2011 01:23 PM
Subject: RE: FESOP fee

Bob,

After January 1, 2012 the fee will become $21.50/ton.

Bob Bernoteit
FESOP Unit Manager,
Illinois EPA, Division of Air Pollution Control - Permit Section

From: Robert Henricks [mailto:Robert.Henricks@bunge.com]
Sent: Friday, December 02, 2011 12:03 PM
To: Bernoteit, Bob
Subject: FESOP fee

Bob, what is the annual fee for a FESOP facility? 251.201 says for a plant emission rate of 100 to <194 tpy the fee is $18/ton. Correct?

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11720 Borman Dr.

St. Louis, MO 63146
Phone: 314-292-2342
Fax: 314-292-4342
Cell: 314-409-5779
robert.henricks@bunge.com

" The 10 C's of employee engagement: Connect, Contribute, Clarity, Convey, Congratulate, Control, Career, Collaborate, Credibility & Confidence." G. Seijts & D. Crim

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R001116

CONFIDENTIAL

PERMIT REVIEW TRAVELER SHEET

CONFIDENTIAL

I.D. #	183020ABT	Source Name	Bunge Grain Milling Inc	Date Received	12-5-2011
Application #	96020027	Location	Danville	Date Opened	12-5-2011

Program	TITLE V	Type	TITLE V-FESOP	Title V Type	NEW

Flag	Date	Section	Contact	Expiration Date
			EJ Review Request # 1464 Submitted on 2/17/2017 Site fee Paid 3/21/2022	

Emissions(Tons/Year)	CO	NOX	PM	SO2	VOM	Total HAP	Highest Single HAP
Current Allowable Rates	45.76 ~~343.21~~	33.36 ~~261.25~~	160.02 ~~209.49~~	0.32 ~~1,299.59~~	3.00 ~~1,671.04~~	460.495804	388.61 - HEXANE
Project/Total Increase							

Initial Completeness		Analyst	Unit Manager	Date of Determination	Application Complete?	
CAAPP Completeness	☐ N/A		RM3	12/8/2011	☒ Yes	☐ No
Fee Completeness	☐ N/A				☐ Yes	☐ No
Technical Completeness					☐ Yes	☐ No

Welcome Phone Call to Permit Applicant

Date	Contact Name	Telephone#	Was Additional Information Requested?

For Incomplete Applications Type of Letter Sent	Analyst	Unit Manager	Date Issued	Number of Items Requested (or Amount of Fee Requested)
Notice of Additional Fees:				$
Notice of Incompleteness(NOI)				
Request for Addditional Information(RAI)				
All Required Information Received?	☐ Yes	☐ No	Date Received	
Notice of Intent to Deny CAAPP				

Permit Processing		Analyst	Date	Unit Manager	Date
Draft Prepared for Unit Manager Review & Comments Returned to Analyst				RMB	6/1/2021
Final Draft Sent to Applicant for Comments					
Submitted to Word Processing					
Draft Permit to Community Relations	☐ N/A				
Public Comment Period Initiated					
Public Hearing Date	☐ N/A				
Public Comment Period Completed	☐ N/A				
45 Day USEPA Comment Period	☐ N/A				
USEPA Comments Received	☐ Yes ☐ No				
Responsiveness Summary Completed	☐ N/A				
Public Participation Completed					
Final Action (Fill in One)		**Analyst**	**Date**	**Unit Manager**	**Date**
☐	Permit Not Required				
☑	Grant	MB		RM3	1/4/2023
☐	Deny				

Mail-Out				
	☐ District Office ____	☐ Public Participation List	☐ Cook County	☐ Health Dept ____
	☐ Enforcement ____	☐ Other ____	Init. TAN	Date 1/4/2023

Permit Electronically Sent to	Applicant	CES	DLC	Community Relations	USEPA	AQPS	FOS
Person Sending (Initials)				RM3			

I.B.D. ⟶ 2-7-96

BUNGE

December 2, 2011

Mr. Bob Bernoteit
Division of Air Pollution Control - Permit Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702

183020 ABT
96020027

Re: FESOP Application
Bunge – Danville Facility
Source ID No. 183020ABT

Dear Mr. Bernoteit:

Please find enclosed two copies of the 200CAAPP form as requested by the enclosed incompleteness letter for our FESOP application. The issued FESOP will replace the current Title V permit. This application pertains to the current grain elevator and corn mill.

If you have any questions or require any further information please do not hesitate to contact Robert Henricks at (314) 292-2342 or by email at robert.henricks@bunge.com.

Sincerely,

Dean Hughes
Eastern Regional Manager – Milling

Enclosure: FESOP 200CAAPP form in duplicate & IEPA letter

RECEIVED
DEC 05 2011
Illinois Environmental Protection Agency
BUREAU OF AIR
STATE OF ILLINOIS

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: FESOP
Date: ____ / ____ / ____
Page ____ of ____
Source Designation:

1700-0015-2233

APPLICATION FOR CAAPP PERMIT
(CHECK ONLY ONE)

- ☐ INITIAL APPLICATION
- ☒ RENEWAL APPLICATION
- ☐ SIGNIFICANT MODIFICATION

FOR AGENCY USE ONLY
ID NUMBER: 183020ABT
PERMIT #: 96020027
DATE:

SOURCE INFORMATION

1) SOURCE NAME: Bunge Milling, Inc.		2) DATE FORM COMPLETED: 12/02/11
3) SOURCE STREET ADDRESS: 321 E. North Street		
4) CITY: Danville		5) ZIP: 61832
6) IS THE SOURCE LOCATED WITHIN CITY LIMITS? ☒ YES ☐ NO		
7) TOWNSHIP NAME: Danville	8) COUNTY: Vermillion	9) TYPICAL NO. OF EMPLOYEES AT THE SOURCE:
10) ILLINOIS AIR POLLUTION SOURCE ID NO. (IF KNOWN): 183020ABT		11) FEDERAL EMPLOYER IDENTIFICATION NO. (FEIN): 37-0614689
12) TYPE OF SOURCE AND PRODUCTS PRODUCED: Corn Mill & Grain Elevator		
13) PRIMARY STANDARD INDUSTRIAL CLASSIFICATION (SIC) CATEGORY: Flour & Other Grain Mill Products		14) PRIMARY SIC NO.: 2041 (NAICS #: 311211)
15a) LATITUDE (DD:MM:SS): 40° 7' 36"		b) LONGITUDE (DD:MM:SS): 87° 37' 24"
16a) UTM ZONE:	b) UTM VERTICAL (KM):	c) UTM HORIZONTAL (KM):
17a) COORDINATE METHOD: I	b) REFERENCE LOCATION: Center of Plant	c) COORDINATE ACCURACY: 1 second
18) SOURCE ENVIRONMENTAL CONTACT PERSON: Eric Silver		19) CONTACT PERSON'S TELEPHONE NO.: (217) 443-9784

RECEIVED
DEC 05 2011
Illinois Environmental Protection Agency
BUREAU OF AIR
STATE OF ILLINOIS

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE F1 a

FOR APPLICANT'S USE

OWNER INFORMATION

20) NAME: Bunge North America, Inc.

21) ADDRESS: 11720 Borman Drive

22) CITY:	23) STATE:	24) ZIP:
St. Louis	MO	63146-1000

25) OWNER'S AGENT (IF APPLICABLE): NA

OPERATOR INFORMATION

26) NAME: SAME AS SOURCE

27) ADDRESS:

28) CITY:	29) STATE:	30) ZIP:

BILLING INFORMATION

31) NAME: Bunge North America, Inc.

32) ADDRESS: 321 E. North Street

33) CITY:	34) STATE:	35) ZIP:
Danville	IL	61832

36) CONTACT PERSON:	37) CONTACT PERSON'S TELEPHONE NO.:
Dean Hughes 217-442-9782	

APPLICANT INFORMATION

38) WHO IS THE PERMIT APPLICANT? (CHECK ONE): ☒ OWNER ☐ OPERATOR

39) ALL CORRESPONDENCE TO: (CHECK ONE) ☐ OWNER ☒ SOURCE ☐ OPERATOR

40) ATTENTION NAME AND/OR TITLE FOR WRITTEN CORRESPONDENCE: Dean Hughes, Eastern Regional Manager - Milling

41) TECHNICAL CONTACT PERSON FOR APPLICATION:	42) CONTACT PERSON'S TELEPHONE NO.:
Robert Henricks 314-292-2342	

SUMMARY OF APPLICATION CONTENTS

NOTE: ITEMS 43 TO 62 WILL BE USED FOR APPLICATION COMPLETENESS DETERMINATION.

43) DOES THE APPLICATION INCLUDE A TABLE OF CONTENTS?	☒ YES ☐ NO
44) DOES THE APPLICATION INCLUDE A LIST OF ALL ITEMS AND ACTIVITIES FOR WHICH A PERMIT IS BEING SOUGHT?	☒ YES ☐ NO
45) DOES THE APPLICATION INCLUDE A PLOT PLAN AND/OR MAP DEPICTING THE AREA WITHIN ONE-QUARTER MILE OF THE SOURCE?	☐ YES ☒ NO
46) DOES THE APPLICATION INCLUDE A PROCESS FLOW DIAGRAM(S) SHOWING ALL EMISSION UNITS AND CONTROL EQUIPMENT, AND THEIR RELATIONSHIP?	☐ YES ☒ NO
47) DOES THE APPLICATION INCLUDE A COMPLETE PROCESS DESCRIPTION FOR THE SOURCE?	☒ YES ☐ NO
48a) DOES THE APPLICATION INCLUDE THE APPROPRIATE, COMPLETED FORMS FOR ALL INDIVIDUAL EMSSION UNITS AND AIR POLLUTION CONTROL EQUIPMENT, LISTING ALL APPLICABLE REQUIREMENTS AND PROPOSED EXEMPTIONS FROM OTHERWISE APPLICABLE REQUIREMENTS?	☐ YES ☒ NO
b) DOES THE APPLICATION ADDRESS OTHER MODES OF OPERATION FOR WHICH A PERMIT IS BEING SOUGHT?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
c) DOES THE APPLICATION INCLUDE ALL REASONABLY ANTICIPATED OPERATING SCENARIOS FOR WHICH A PERMIT IS BEING SOUGHT?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
49) DOES THE APPLICATION INCLUDE A COMPLETED "FUGITIVE EMISSION" FORM 391-CAAPP?	☐ YES ☒ NO
50) DOES THE APPLICATION INCLUDE A COMPLETED "FEE DETERMINATION FOR CAAPP PERMIT" FORM 292-CAAPP? (NOTE: ANNUAL FEES WILL BE BASED UPON INFORMATION CONTAINED IN THIS FORM.)	☒ YES ☐ NO
51) DOES THE APPLICATION INCLUDE A COMPLETED "HAZARDOUS AIR POLLUTANT EMISSION SUMMARY" FORM 215-CAAPP?	☐ YES ☒ NO
52) DOES THE APPLICATION INCLUDE THE CALCULATIONS ON WHICH THE FOLLOWING, TO THE EXTENT THEY ARE RELATED TO AIR EMISSIONS, WERE BASED: • POLLUTANT EMISSION RATES, • FUELS AND RAW MATERIALS USAGE, AND • CONTROL EQUIPMENT EFFICIENCY?	☒ YES ☐ NO
53) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT" FORM 293-CAAPP?	☐ YES ☒ NO
54) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE CERTIFICATION" FORM 296-CAAPP?	☐ YES ☒ NO
55) DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE-ADDENDUM FOR NONCOMPLYING EMISSION UNITS" FORM 294-CAAPP FOR ONE OR MORE NONCOMPLIANT EMISSION UNITS FOR WHICH ISSUANCE OF A CAAPP PERMIT IS REQUESTED?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE

56) HAS THE APPLICANT RETAINED A COPY OF THIS APPLICATION AT THE SOURCE? (NOTE: IF TRADE SECRET INFORMATION IS NOT BEING SUBMITTED, THEN ONLY THE ORIGINAL APPLICATION NEED BE INITIALLY SUBMITTED, HOWEVER, THE ILLINOIS EPA MAY REQUEST UP TO 4 COPIES OF THE FINAL APPLICATION PRIOR TO PUBLIC NOTICE.)	☒ YES ☐ NO
57a) DOES THE APPLICATION CONTAIN TRADE SECRET INFORMATION?	☐ YES ☒ NO
b) IF YES, HAS SUCH INFORMATION BEEN PROPERLY MARKED AND CLAIMED, AND TWO SEPARATE COPIES OF THE APPLICATION SUITABLE FOR PUBLIC INSPECTION BEEN SUBMITTED, IN ACCORDANCE WITH APPLICABLE REGULATIONS?	☐ YES ☐ NO
58) DOES THE APPLICATION INCLUDE AN EARLY REDUCTION DEMONSTRATION FOR HAZARDOUS AIR POLLUTANTS (HAP) PURSUANT TO SECTION 112(i)(5) OF THE CLEAN AIR ACT AS AMENDED IN 1990?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
59) DOES THE APPLICATION INCLUDE A PROPOSED DETERMINATION OF MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT) FOR HAZARDOUS AIR POLLUTANTS PURSUANT TO SECTION 112 OF THE CLEAN AIR ACT AS AMENDED IN 1990?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
60) HAS THE APPLICANT REGISTERED A RISK MANAGEMENT PROGRAM FOR ACCIDENTAL RELEASES PURSUANT TO SECTION 112(r) OF THE CLEAN AIR ACT AS AMENDED IN 1990 OR INTENDS TO COMPLY WITH THIS REQUIREMENT IN ACCORDANCE WITH ITS COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
61a) FOR CAAPP PERMIT RENEWALS, DOES THE APPLICATION INCLUDE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
b) FOR SIGNIFICANT MODIFICATIONS AND INITIAL CAAPP APPLICATIONS SUBMITTED AFTER APRIL 20, 1998, DOES THE APPLICATION INCLUDE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64 FOR EMISSION UNITS WITH POST-CONTROL EMISSIONS GREATER THAN OR EQUAL TO THE MAJOR SOURCE THRESHOLD?	☒ *NA ☐ YES ☐ NO *NOTE: NOT APPLICABLE
62) FOR SIGNIFICANT MODIFICATIONS, DOES THE APPLICATION INCLUDE A DESCRIPTION OF THE PROPOSED CHANGE(S), INCLUDING ALL PHYSICAL CHANGES IN EQUIPMENT, CHANGES IN THE METHOD OF OPERATION, CHANGES IN EMISSIONS, AND ANY NEW APPLICABLE REQUIREMENTS WHICH WILL APPLY AS A RESULT OF THE PROPOSED CHANGE?	☒ YES ☐ NO

NOTE: ANSWERING "NO" TO ANY OF THE ABOVE (ITEMS 43-62, EXCEPT ITEM 57a) MAY RESULT IN THE APPLICATION BEING DEEMED INCOMPLETE.

63) DOES THE APPLICATION REQUEST TO UTILIZE THE OPERATIONAL FLEXIBILITY PROVISIONS AND INCLUDE THE INFORMATION REQUIRED FOR SUCH USE?	☐ YES ☒ NO
64a) DOES THE APPLICANT HEREBY REQUEST A PERMIT SHIELD FOR THE ENTIRE SOURCE?	☐ YES ☒ NO
b) IF NO, DOES THE APPLICATION CONTAIN A REQUEST FOR A PERMIT SHIELD FOR SPECIFIC ITEMS ONLY, IN ACCORDANCE WITH THE INSTRUCTIONS FOR A CAAPP PERMIT?	☐ YES ☒ NO
65) DOES THE APPLICATION INCLUDE A COMPLETED "LISTING OF INSIGNIFICANT ACTIVITIES" FORM 297-CAAPP?	☐ YES ☒ NO
66) DOES THE APPLICATION INCLUDE A DRAWING PROVIDING THE SOURCE LAYOUT? IF NO, PLEASE NOTE THAT THE ILLINOIS EPA MAY REQUEST SUCH A DRAWING UPON DETAILED REVIEW OF THE APPLICATION.	☐ YES ☒ NO

67) WHY IS THE APPLICANT APPLYING FOR A CAAPP PERMIT (CHECK ALL THAT APPLY)?

☐ THE POTENTIAL TO EMIT ONE OR MORE AIR POLLUTANTS FOR THE SOURCE IS 100 TONS/YEAR OR GREATER.

☐ THE SOURCE IS AN AFFECTED SOURCE FOR ACID RAIN DEPOSITION.

☐ THE POTENTIAL TO EMIT VOM IS 25 TONS/YEAR OR MORE AND THE SOURCE IS LOCATED IN ONE OF THE FOLLOWING CHICAGO AREA COUNTIES OR TOWNSHIPS:

- COOK COUNTY
- DUPAGE COUNTY
- KANE COUNTY
- LAKE COUNTY
- McHENRY COUNTY
- WILL COUNTY
- AUX SABLE TOWNSHIP, GRUNDY COUNTY
- GOOSE LAKE TOWNSHIP, GRUNDY COUNTY
- OSWEGO TOWNSHIP, KENDALL COUNTY

NOTE: THE U. S. EPA HAS APPROVED AN EXEMPTION ON NITROGEN OXIDES (NOx) EMISSIONS AS AN OZONE PRECURSOR IN THE CHICAGO OZONE NON-ATTAINMENT AREA. THEREFORE THE MAJOR SOURCE THRESHOLD FOR NOx EMISSIONS IS 100 TONS/YEAR UNTIL THIS EXEMPTION IS NO LONGER EFFECTIVE. SHOULD THE CURRENT NOx EXEMPTION BE NO LONGER EFFECTIVE, THE MAJOR SOURCE THRESHOLD FOR NOx EMISSIONS WILL BE 25 TONS/YEAR IN THE ABOVE CHICAGO AREA COUNTIES AND TOWNSHIPS.

☐ THE POTENTIAL TO EMIT AN INDIVIDUAL HAZARDOUS AIR POLLUTANT IS 10 TONS/YEAR OR MORE, OR THE POTENTIAL TO EMIT ALL SOURCE WIDE HAZARDOUS AIR POLLUTANTS IS 25 TONS/YEAR OR MORE, OR MEETS AN APPLICABLE LOWER THRESHOLD.

☐ THE SOURCE CONTAINS EQUIPMENT OR OPERATIONS SUBJECT TO CERTAIN USEPA EMISSION STANDARDS (NSPS AND NESHAP) FOR WHICH USEPA REQUIRES A CAAPP PERMIT.

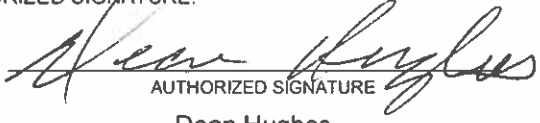
68a) ARE ACTUAL EMISSIONS OF THE SOURCE BELOW THE APPLICABILITY LEVELS FOR A CAAPP PERMIT?	☒ YES	☐ NO
b) DOES THE APPLICATION CONTAIN PROPOSED PERMIT LIMITATIONS THAT WILL CONSTRAIN THE EMISSIONS AND PRODUCTION OR OPERATION OF THE SOURCE SUCH THAT POTENTIAL EMISSIONS OF THE SOURCE WILL FALL BELOW THE LEVELS FOR WHICH A CAAPP PERMIT IS REQUIRED?	☒ YES	☐ NO
c) DOES THE APPLICANT HEREBY REQUEST A FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CONSTRAINING THE EMISSIONS AND PRODUCTION OR OPERATION OF THE SOURCE SUCH THAT POTENTIAL EMISSIONS WOULD FALL BELOW APPLICABILITY LEVELS AND THEREBY EXCLUDE THE SOURCE FROM REQUIRING A CAAPP PERMIT?	☒ YES	☐ NO

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

69) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: 

AUTHORIZED SIGNATURE

Eastern Regional Manager - Milling

TITLE OF SIGNATORY

Dean Hughes

TYPED OR PRINTED NAME OF SIGNATORY

12 / 2 / 11

DATE

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit and D & E General Aspiration (5012-0004-0015) controlled by Baghouse Filters 37RF8; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemos Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
Bldg 105/115 General Aspiration (4880-0034-0027) controlled by Baghouse Filters DD 484RF12;
Bldg 102/105 General Aspiration (4880-0034-0001) controlled by Baghouse Filters MCF 144-756;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;

Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;

Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;

AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Germ Dust Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
FTS Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

<u>Corn Mill Products Storage:</u>
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

<u>Corn Mill Products Milling and Handling:</u>
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;

Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60. 300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected

facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute

period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English

P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause

or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency

of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility

including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

h. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

i. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(l).

j. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

k. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

l. The emission units described in Conditions 11(i), (j), and (k) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

m. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

n. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(l) and (m).

o. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(l) and (m) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)

Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04
Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg. 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North St Truck Dump Pit #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19

Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General Aspiration	0.002	0.0015	43,700	0.75	3.28	0.56	2.46
Bldg 102/105 General Aspiration	0.002	0.0015	55,000	0.94	4.13	0.71	3.10
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack & Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03

1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food Receiver	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02
300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04
#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
PCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08
Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79

Aspiration							
Mixer General Aspiratior	0.002	0.0015	1,500	0.03	0.11	0.02	0.08
3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04
Viscosity Flour Receiver	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0	0.02	0	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grinding	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kice Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.02
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	0.0200
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42
CCM260 Process Aspiration(S 105 Carter-Day)	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	EMISSIONS PM (Tons/Yr)	EMISSIONS PM_{10} (lbs/Hr)	EMISSIONS PM_{10} (Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	EMISSIONS PM (Tons/Yr)	EMISSIONS PM_{10} (lbs/Hr)	EMISSIONS PM_{10} (Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Compliance with the annual limits in Conditions 12(a) through 12(e) of this permit shall be determined on a daily basis from the sum of the data for the current day plus the preceding 364 days (running 365 days total).

g. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52
Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

h. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

i. Compliance with the annual limits in Condition 12(g) and (h) of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

14a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

15a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

17a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the

presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

18a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted on a quarterly basis no later than 30 days after the end of the preceding calendar quarter.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean &

Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points,

sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

20a. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis

(or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 11(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/day and hours/year);

viii. Daily and annual emissions of PM, and PM_{10} from the source with supporting calculations (tons/month and tons/year).

ix. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

x. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year); and

xi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the combustion of natural gas, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 23(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

24. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

25. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance

or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i) and the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3)

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
321 East North Street
Danville, Illinois 61832

Application No.: 11110009 I.D. No.: 183020ABT
Applicant's Designation: Date Received: November 7, 2011
Subject: Thrustock Flow Upgrade
Date Issued: December 5, 2011
Location: 321 East North Street, Danville, Vermillion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting an upgrade to the thru stock portion of the corn mill (the affected mill), as described in the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit authorizes an upgrade to the thru stock portion of the affected mill, including the installation of the following units. The Permittee plans to improve the quality of the products and the efficiency of the process through the system upgrade.

i. The installation of one new aspirator/cyclone in the Thru Stock 3rd Germ Stream System with emissions controlled by the existing S. Lunchroom Screening Baghouse;

ii. The installation of three Carter Day Duo Type aspirators in the existing Coarse Thru Stock System with emissions controlled by the existing Camas/Bran Baghouse; and

iii. The installation of three Carter Day Duo Type aspirators in the existing Fine Thru Stock System with emissions also controlled by Camas/Bran Baghouse.

b. This permit does not authorize any increase in the production or capacity of the affected mill as a result of the proposed system upgrade.

2a. The affected mill shall comply with the applicable emission standards and other requirements as set forth in unit-specific Condition 7.3 in the Clean Air Permit Program (CAAPP) Permit No. 96020027.

b. This permit does not revise or relax requirements for testing, recordkeeping, and reporting associated with existing emissions units at the plant, as established in CAAPP Permit No. 96020027.

3. This permit is issued based on minimal emission increase as a result of the proposed system upgrade. For this purpose, the increase in PM/PM_{10} emissions from the upgrade to the Germ Stream System (S. Lunchroom Screening Baghouse), and the upgrade to the Thru Stock Systems (Filter Camas/Bran Baghouse) shall each not exceed 0.25 lbs/hour and 1.10 tons/year.

4. At all times, the Permittee shall maintain and operate the new equipment and associated control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

5. The Permittee may operate the new equipment pursuant to this construction permit until renew or reissuance of its CAAPP permit to address this equipment. This condition supersedes Standard Condition 6.

If you have any questions on this, please call Wei Han or Minesh Patel at 217/785-1705.

Edwin C. Bakowski, P.E. Date Signed: _____
Manager, Permit Section
Division of Air Pollution Control

ECB:WH:psj

cc: Region 3

CAAPP/TITLE V FESOP COMPLETENESS REVIEW SHEET

Source Name: **Bunge North America, Inc.**

Source I.D.#: **183 020 ABT**

Application #: **96020027**

Date Received: **12-05-11**

Completeness Review Due Date: **12-27-11**

Previous Permit Expiration Date: **01-13-12**

Type of Application: Initial New Renewal

1. Are questions 8-10 in Section 4 of CAAPP 200 all marked "yes"? YES NO
   Company sent the old 200 form.
   If yes, the only forms needed are 200, 292, 296 and 299

2. Does the source name on the application match the name in ICEMAN? YES NO
   If no, request forms 272 and 273 for ownership change

3. Does the signature in the certification blocks match the Responsible Official on the previous permit? If no, request a 273 or 500 if delegating authority. YES NO

4. Are there any VNs pending (search VN tracking database)? YES NO
   If yes, forward to CAAPP unit manager for review.

5. Is there trade secret/confidentiality claims made on the application? YES NO
   (Form 200, section 5, question27) If yes, forward to CAAPP unit manager for review.

6. Check for the following forms:
   - ☒ 200
   - ☐ 286
   - ☒ 299 (FESOP only)
   - ☒ 292
   - ☒ 296
   - ☐ 293
   - ☐ 464 (if a new application or first time renewal)
   - ☐ 287 (only if anything in Form 200, section 5 is marked "Incorporate by Reference" marked)

7. Are questions 1-6 in Section 5 of CAAPP 200 all marked "yes" or "Incorporate by Reference"? YES NO
   If no, information must be requested, see 9-15 of this sheet.

8. Is additional information needed? YES (NO)
   For CAAPPs - If yes, continue to #9-15. If no, skip to #16. If no, skip to #16.
   For FESOPs – Forward the entire application to the unit manager for additional review

9. Company contact person: **Robert Henricks**

10. Contact Email or Phone: **314/292-2342**

11. How was the source contacted? ☐ EMAIL ☐ PHONE Date of request? _____

12. Date forms are due back: _____ Date forms were received: _____
    If additional info not rec'd by the due date, send NOI

13. Date NOI sent: _____ Due Date: _____ (allow 15 days for response)

14. Date NOI response received: _____ Response not rec'd by completeness due date _____

15. Date renewal due: _____ Is the application timely? YES NO
    If no, send an email to CES and the CAAPP unit manager

16. If fees are due, send file to Lori Pennington for invoice. Date: _____

Administrative Reviewer: Linda Marr

Administratively Complete. Sent to CAAPP or FESOP unit manager on: _____

Preliminarily Incomplete. Sent to CAAPP or FESOP unit manager on: 12-6-11

CAAPP/FESOP Unit Manager: RMB Date: 12/6/2011

Complete or Incomplete Make a phone call or email source (go to #9-15 on front page)

Send NOI for deficiencies noted on front page and the info listed below (Go to #14-15 on front page)

Date to Word Processing: N/A

Date Completeness Letter mailed: 12-8-11 Completeness Letter could not be sent _____

Additional Information Requested by the Administrative Reviewer	
1.	**CAAPP 286** -Not Needed for FESOP
2.	**CAAPP 287** -Not Needed for FESOP
3.	**CAAPP 293** -Not Needed for FESOP
Forms will not be requested until unit manager looks through file and gives the ok. Information may already be included in the application.	
5.	

Additional Information Requested by the CAAPP or FESOP Unit Manager	
1.	
2.	
3.	
4.	
5.	

Attach a copy of all letters, additional information and emails received in chronological order (newest on the top) and place this packet on top of the application originally received and then place it all in the permit record.

Mail letter to: **Bunge North America, Inc.**
Attn: Dean Hughes
321 East North Street
Danville, IL 61832

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR JOHN KIM, INTERIM DIRECTOR

CAAPP APPLICATION COMPLETENESS DETERMINATION

APPLICANT

Bunge North America, Inc.
Attn: Dean Hughes
321 East North Street
Danville, Illinois 61832

Date of Determination:	December 6, 2011
Application/Permit No.:	96020027
I.D. Number:	183020ABT
Date Received:	December 5, 2011
Source Name:	Bunge Milling, Inc.
Location of Source:	321 East North Street, Danville, Vermilion County

Dear Mr. Hughes:

This letter provides notification that your Clean Air Act Permit Program (CAAPP) application received on the date indicated above, has been determined by the Illinois EPA to be complete pursuant to Section 39.5(5) of the Illinois Environmental Protection Act (Act).

Based on the completeness determination, the owner or operator of the CAAPP source is not required to renew existing state operating permits for emission units at the CAAPP source. The owner or operator of the CAAPP source is not, however, relieved of any obligation to obtain state operating permits for emission units at the CAAPP source for which no current state operating permit exists.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP-FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP application pursuant to Section 39.5 of the Act.

If you have any questions concerning this matter, please contact the Division of Air Pollution Control Permit Section at 217/782-2113.

Edwin C. Bakowski RWB

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

ECB:RWB:lsm

cc: FOS, Region 3
Application File
Compliance Section

Kras, Kim

From: Dragovich, Michael
Sent: Wednesday, July 3, 2013 9:23 AM
To: James Burris
Cc: Brodsky, Valeriy; Bernoteit, Bob
Subject: RE: Kankakee and Danville FESOP

Jim,

I received some comments back from Bob Henricks on the draft Kankakee permit. I have to go over the comments and corrections with my supervisor before the permit is sent out for Public Comment.

Thanks,
Mike Dragovich

From: James Burris [mailto:James.Burris@bunge.com]
Sent: Wednesday, July 03, 2013 9:03 AM
To: Dragovich, Michael
Subject: Kankakee and Danville FESOP

Mike,

As you may be aware Bob Henricks has retired and I will be taking over the Kankakee FESOP project. I think you were close to issuing a final permit. Please let me know the status of the permit and I would like to have one review of a final draft before the permit is issued.

As for the Danville FESOP, I will be sending you a revised permit application. After reviewing all emission sources with the plant I discovered a number of errors in the original application.

Please let me know if you have any questions.

Thank you,

Jim Burris, PE
Bunge North America
(314) 292-2937 phone
(314) 292-2384 fax
(314) 308-3904 cell

From: Robert Henricks/STL/BNA/Bunge
To: michael.dragovich@illinois.gov, bob.bernoteit@illinois.gov,
Cc: Patrick Mullady/KNK/BNA/Bunge@BG, Bill Gross/STL/BNA/Bunge@BG, Loren Polak/STL/BNA/Bunge, James Burris/STL/BNA/Bunge@BG
Date: 06/13/2013 05:13 PM
Subject: Fw: Bunge Kankakee FESOP draft draft

Mike, as discussed this morning we discovered one source previously missing from the list. Accordingly, I have updated the permit and our supporting spreadsheet. You indicated that the earliest you will get to this is July, 2013. Therefore, Jim Burris is copied as he will take over Bunge responsibility for this matter as of July 1, 2013.

[attachment "Facility-Wide Emissions FESOP June 2013-Process FESOP draft.xls" deleted by James

Burris/STL/BNA/Bunge] [attachment "03110063 DRAFT 13-03-18_12June2013 update.doc" deleted by James Burris/STL/BNA/Bunge]

Robert Henricks, PE
PO Box 28500
11720 Borman Dr.
St. Louis, MO 63146
Phone: 314-292-2342
Fax: 314-292-4342
Cell: 314-409-5779
robert.henricks@bunge.com

"Continuous improvement is a deliberate journey. We look at what we could have done better, what worked and didn't work and how we can improve." Robert Pence, P.E., CEO & President, Freeze & Nichols Inc., winner of the 2012 Malcolm Baldrige National Quality Award

----- Forwarded by Robert Henricks/STL/BNA/Bunge on 06/13/2013 05:08 PM -----

From: Robert Henricks/STL/BNA/Bunge
To: michael.dragovich@illinois.gov, bob.bernoteit@illinois.gov,
Cc: Patrick Mullady/KNK/BNA/Bunge@BG, Bill Gross/STL/BNA/Bunge@BG, Loren Polak/STL/BNA/Bunge
Date: 04/05/2013 04:39 PM
Subject: Bunge Kankakee FESOP draft draft

Mike, I do not see why we need any limits beyond 1.a, where you limit emissions below major. But, here are our comments and recommendations. I did not replace/update the Attachment a table, which needs updating. I have included the spreadsheet which includes all of the calculations. Will be out all next week. Can discuss details the following week - week of April 15. Maybe a review of the draft before it goes public will be in order, with all of the changes we request.

[attachment "03110063 DRAFT 13-03-18.doc" deleted by Robert Henricks/STL/BNA/Bunge] [attachment "Facility-Wide Emissions FESOP March 2013-Process FESOP draft.xls" deleted by Robert Henricks/STL/BNA/Bunge]

Robert Henricks, PE
PO Box 28500
11720 Borman Dr.
St. Louis, MO 63146
Phone: 314-292-2342
Fax: 314-292-4342
Cell: 314-409-5779
robert.henricks@bunge.com

"Continuous improvement is a deliberate journey. We look at what we could have done better, what worked and didn't work and how we can improve." Robert Pence, P.E., CEO & President, Freeze & Nichols Inc., winner of the 2012 Malcolm Baldrige National Quality Award

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397
BRUCE RAUNER, GOVERNOR LISA BONNETT, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

Bunge North America, Inc.
Attn: Kenny Head
321 East North Street
Danville, Illinois 61832

Application No.: 15100009 I.D. No.: 183020ABT
Applicant's Designation: Date Received: October 7, 2015
Subject: Cyclone Receivers
Date Issued: December 21, 2015
Location: 321 East North Street, Danville, Vermillion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of two (2) cyclone receivers (Extrusion Receiver; 108 A-Bin Receiver controlled by existing baghouse) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the construction of the emission units listed above not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM) and Particulate Matter less than 10 microns (PM_{10}) from the above-listed equipment below the levels that would trigger the applicability of these rules.

b. Operation of the equipment listed above is allowed under this permit until final action is taken on the Federally Enforceable State Operating Permit (FESOP) application for this source.

2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

3. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

4a. Emissions and operation of the emission units of the flour handling system shall not exceed the following limits:

Item of Equipment	(scfm)	(gr/dscf)	Emissions PM/PM_{10} (Lb/Hr)	(Tons/Yr)
Extrusion Receiver	4,000	0.02	0.69	3.00
108 A-Bin Receiver	500	0.02	0.09	0.38
			Total:	3.38

These limits are based on exhaust air flow rate, grain loading, and information in the application. The limits on PM_{10} also limit the emissions of $PM_{2.5}$.

b. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

5a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the air pollution control equipment:

A. Records for periodic inspection of the pollution control equipment with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The maximum blower rate in scfm each month for the extrusion system; and

iii. Monthly and annual PM and PM_{10} emissions from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be available for inspections and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

6a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this, please call Mike Dragovich at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:MJD:psj

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

   a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

   b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

   c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

   d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the propose equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from th Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipmen covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements o that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result c the construction or development authorized by this permit.

R001176

183020ABT
11e035026
(9602002 7)
Fesop

BUNGE

March 10, 2016

RECEIVED
STATE OF ILLINOIS
MAR 15 2016
Environmental Protection Agency
BUREAU OF AIR

Mr. Ray Pilapil
Division of Air Pollution Control - Permit Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702

Re: Construction Permit Application (FESOP Source)
Bunge – Danville Facility
Source ID No. 183020ABT

Dear Mr. Pilapil:

Please find enclosed two copies of our construction permit application to install a new cyclone receiver at our facility in Danville, Illinois. After the project is complete a separate application will be submitted to update our FESOP application.

A check for $4,000 is enclosed with this application package. The application package includes the following:

- A project description
- A summary of emission calculations
- A Form 197-FEE, Fee Determination Form
- A Permit Application Fee of $4,000 (Check made payable to Illinois EPA, Division of Air Pollution Control-Permit Section)
- A Form APC628, Construction Permit Application for a FESOP Source,
- Two Form APC220, Emission Source Information (one form for each cyclone receiver), and
- A process flow diagram

Please review the enclosed construction permit application. If you have any questions or require any further information please contact Jim Burris at (314) 292-2937 or by email at james.burris@bunge.com.

Sincerely,

Kenny Head
Plant Manager

Enclosure

Bunge North America, Inc.
321 E. North Street
Danville, IL 61832
Phone: (217) 442-1800 **Fax:** (217) 443-9782

Bunge North America

Whole Grain Upgrade – Danville

Project Description

The Bunge corn mill at Danville plans to upgrade its Whole Grain Process through the addition of a coarse whole grain transfer line (WG260). The proposed project involves a new pneumatic product transfer receiver which will discharge to the atmosphere.

New Unit – Description and Emission Calculations

This project will involve installing a new pneumatic transfer receiver, the WG260 Lift receiver. Table 1 below lists the maximum uncontrolled potential emissions from this unit. Since cyclones efficiency nears 100% for larger sized particulate matter, all PM emitted is assumed to be PM2.5. That is, PM, PM10 and PM2.5 emissions are assumed to be equal. Maximum emissions assumes 8,760 hour of operation annually.

Table 1. Maximum (8,760 hr/year) Uncontrolled Potential Emissions.

Emission Unit	Grain Loading (grain /cf)	Air Flow Rate (cfm)	PM (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)
WG260 Lift Receiver	0.020	682	0.117	0.117	0.117	0.512	0.512	0.512

The process is not expected to operate 8,760 hours per year. Realistically, it will operate closer to 7,200 hours per year (300 days/year). Table 2 below shows the expected emissions from the receiver operating 7,200 hours/year. It uses the same assumption that PM, PM10 and PM2.5 emissions are equal.

Table 2. Average (7,200 hr/year) Actual Expected Emissions.

Emission Unit	Grain Loading (grain /cf)	Air Flow Rate (cfm)	PM (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)
WG260 Lift Receiver	0.020	682	0.117	0.117	0.117	0.421	0.421	0.421

Illinois Environmental Protection Agency

Bureau of Air • 1021 North Grand Avenue East • P.O. Box 19506 • Springfield • Illinois • 62794-9506

FEE DETERMINATION FOR CONSTRUCTION PERMIT APPLICATION

$4,000 SK

FOR AGENCY USE ONLY

ID Number: 183020ABT Permit #: 16030026

☐ Complete ☐ Incomplete Date Complete: 3-15-16

Check Number: 3517229 Account Name: BUNG

This form is to be used to supply fee information that must accompany all construction permit applications. This application must include payment in full to be deemed complete. Make check or money order payable to the Illinois Environmental Protection Agency, Division of Air Pollution Control - Permit Section at the above address. Do NOT send cash. Refer to instructions (197-INST) for assistance.

RECEIVED STATE OF ILLINOIS MAR 15 2016 Environmental Protection Agency BUREAU OF AIR

RECEIVED STATE OF ILLINOIS MAR 15 2016 Environmental Protection Agency BUREAU OF AIR

Source Information

1. Source Name: Bunge North America, Inc.
2. Project Name: Coarse Whole Grain Transfer
3. Source ID #: (if applicable) 183020ABT
4. Contact Name: Jim Burris
5. Contact Phone #: 314-292-2937

Fee Determination

6. The boxes below are automatically calculated.

Section 1 Subtotal $0.00 + Section 2, 3 or 4 Subtotal $4,000.00 = $4,000.00 Grand Total

Section 1: Status of Source/Purpose of Submittal

7. Your application will fall under only one of the following five categories described below. Check the box that applies. Proceed to applicable sections. For purposes of this form:

- **Major Source** is a source that is required to obtain a CAAPP permit.
- **Synthetic Minor Source** is a source that has taken limits on potential to emit in a permit to avoid CAAPP permit requirements (e.g.,FESOP).
- **Non-Major Source** is a source that is not a major or synthetic minor source.

☑ Existing source without status change or with status change from synthetic minor to major source or vice versa. Proceed to Section 2.

☐ Existing non-major source that will become synthetic minor to major source. Proceed to Section 4.

☐ New major or synthetic minor source. Proceed to Section 4.

☐ New non-major source. Proceed to Section 3.

☐ AGENCY ERROR. If this is a timely request to correct an issued permit that involves only an agency error and if the request is received within the deadline for a permit appeal to the Pollution Control Board. Skip Sections 2, 3 and 4. Proceed directly to Section 5.

$0.00 Section 1 Subtotal

This agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 ET SEQ. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Section 2: Special Case Filing Fee

8. **Filing Fee**. If the application only addresses one or more of the following, check the appropriate boxes, skip Sections 3 and 4 and proceed directly to Section 5. Otherwise, proceed to Section 3 or 4 as appropriate.

Addition or replacement of control devices on permitted units.

Pilot projects/trial burns by a permitted unit

Land remediation projects

Revisions related to methodology or timing for emission testing

Minor administrative-type change to a permit

Section 3: Fees for Current or Projected Non-Major Sources

9.	This application consists of a single new emission unit or no more than two modified emission units. ($500 fee)	9. _____
10.	This application consists of more than one new emission unit or more than two modified units. ($1,000 fee)	10. _____
11.	This application consists of a new source or emission unit subject to Section 39.2 of the Act (i.e., Local Siting Review), a commercial incinerator or a municipal waste, hazardous waste, or waste tire incinerator; a commercial power generator; or an emission unit designated as a complex source by agency rulemaking. ($15,000 fee)	11. _____
12.	A public hearing is held (see instructions). ($10,000 fee)	12. _____
13.	Section 3 subtotal. (lines 9 through 12 - entered on page 1)	13. $0.00

Section 4: Fees for Current or Projected Major or Synthetic Minor Sources

Application contains modified emission units only	14. For the first modified emission unit, enter $2,000.	
	15. Number of additional modified emission units = x $1,000.	15. $0.00
	16. Line 14 plus line 15, or $5,000, whichever is less.	16. $0.00
Application contains new and/or modified emission units	17. For the first new emission unit, enter $4,000.	17. $4,000.00
	18. Number of additional new and/or modified emission units = 0 x $1,000.	18. $0.00
	19. Line 17 plus line 18, or $10,000, whichever is less.	19. $4,000.00
Application contains netting exercise	20. Number of individual pollutants that rely on a netting exercise or contemporaneous emissions decrease to avoid application of PSD or nonattainment area NSR = _____ x $3,000.	20. $0.00
Additional Supplemental Fees	21. If the new source or emission unit is subject to Section 39.2 of the Act (i.e. siting); a commercial incinerator or other municipal waste, hazardous waste, or waste tire incinerator; a commercial power generator; or one or more other emission units designated as a complex source by Agency rulemaking, enter $25,000.	21. _____
	22. If the source is a new major source subject to PSD, enter $12,000.	22. _____
	23. If the project is a major modification subject to PSD, enter $6,000.	23. _____
	24. If this is a new major source subject to nonattainment area (NAA) NSR, enter $20,000.	24. _____
	25. If this is a major modification subject to NAA NSR, enter $12,000.	25. _____
	26. If the application involves a determination of MACT for a pollutant and the project is not subject to BACT or LAER for the related pollutant under PSD or NSR (e.g., VOM for organic HAP), enter $5,000 per unit for which a determination is requested or otherwise required. _____ x $5,000.	26. $0.00
	27. If a public hearing is held (see instructions), enter $10,000.	27. _____
28. Section 4 subtotal (line 16 and lines 19 through 28) to be entered on page1		28. $4,000.00

Section 5: Certification

NOTE: Applications without a signed certification will be deemed incomplete.

29. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the information contained in this fee application form is true, accurate and complete.

by:

Signature

Kenny Head

Typed or Printed Name of Signatory

Plant Manager

Title of Signatory

3/10/16

Date

Illinois Environmental Protection Agency
Division Of Air Pollution Control – Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Construction Permit Application For a FESOP Source (FORM APC628)

For Illinois EPA use only	
BOA ID No.:	183020ABT
Application No.:	16D 30026
Date Received:	3-15-16

This form is to be used to supply information to obtain a construction permit for a proposed project involving a Federally Enforceable State Operating Permit (FESOP) or Synthetic Minor source, including construction of a new FESOP source. Other necessary information must accompany this form as discussed in the "General Instructions For Permit Applications," Form APC-201.

Proposed Project

1. Working Name of Proposed Project:
   Coarse Whole Grain Transfer
2. Is the project occurring at a source that already has a permit from the Bureau of Air (BOA)?
   ☐ No ☒ Yes If Yes, provide BOA ID Number: 183020ABT
3. Does this application request a revision to an existing construction permit issued by the BOA?
   ☒ No ☐ Yes If Yes, provide Permit Number:
4. Does this application request that the new/modified emission units be incorporated into an existing FESOP issued by the BOA?
   ☐ No ☒ Yes If Yes, provide Permit Number: Not Yet Issued

Source Information

5. Source name:*
   Bunge North America, Inc.
6. Source street address:*
   321 E. North Street

7. City:	8. County:	9. Zip code:
Danville	Vermillion	61832

ONLY COMPLETE THE FOLLOWING FOR A SOURCE WITHOUT AN ID NUMBER.

10. Is the source located within city limits? ☐ Yes ☐ No
    If no, provide Township Name:

11. Description of source and product(s) produced:	12. Primary Classification Code of source: SIC: ____ or NAICS: ____
13. Latitude (DD:MM:SS.SSSS):	14. Longitude (DD:MM:SS.SSSS):

* If this information different than previous information, then complete a new Form 200-CAAPP to change the source name in initial FESOP application for the source or Form APC-620 for Air Permit Name and/or Ownership Change if the FESOP has been previously issued.

Applicant Information

15. Who is the applicant?	16. All correspondence to: (check one)
☒ Owner ☐ Operator	☐ Owner ☐ Operator ☒ Source
17. Applicant's FEIN:	18. Attention name and/or title for written correspondence:
37-0614689	Kenny Head

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Owner Information*		
19. Name: Bunge North America, Inc.		
20. Address: 11720 Borman Drive		
21. City: St Louis	22. State: MO	23. Zip code: 63146

* If this information different than previous information, then complete Form 272-CAAPP for a Request for Ownership Change for CAAPP Permit for an initial FESOP application for the source or Form APC-620 for Air Permit Name and/or Ownership Change if the FESOP has been previously issued.

Operator Information (If Different from Owner)*		
24. Name Bunge North America, Inc.		
25. Address: 321 E. North Street		
26. City: Danville	27. State: IL	28. Zip code: 61832

* If this information different than previous information, then complete a new Form 200-CAAPP to change the source name in initial FESOP application for the source or Form APC-620 for Air Permit Name and/or Ownership Change if the FESOP has been previously issued.

Technical Contacts for Application	
29. Preferred technical contact: (check one) ☒ Applicant's contact ☐ Consultant	
30. Applicant's technical contact person for application: Jim Burris	
31. Contact person's telephone number 314 292-2937	32. Contact person's email address: james.burris@bunge.com
33. Applicant's consultant for application:	
34. Consultant's telephone number:	35. Consultant's email address:

Review Of Contents of the Application		
36. Is the emission unit covered by this application already constructed? If "yes", provide the date construction was completed: Note: The Illinois EPA is unable to issue a construction permit for a emission unit that has already been constructed.	☐ Yes	☒ No
37. Does the application include a narrative description of the proposed project?	☒ Yes	☐ No
38. Does the application contain a list or summary that clearly identifies the emission units and air pollution control equipment that are part of the project?	☒ Yes	☐ No
39. Does the application include process flow diagram(s) for the project showing new and modified emission units and control equipment and related existing equipment and their relationships?	☒ Yes	☐ No
40. If the project is at a source that has not previously received a permit from the BOA, does the application include a source description, plot plan and site map?	☒ Yes	☐ No

Review Of Contents of the Application (continued)	
41. Does the application include relevant information for the proposed project as requested on Illinois EPA, BOA application forms (or otherwise contain all the relevant information)?	☒ Yes ☐ No
42. Does the application identify and address all applicable or potentially applicable emissions standards, including: a. State emission standards (35 IAC Chapter I, Subtitle B); b. Federal New Source Performance Standards (40 CFR Part 60); c. Federal standards for HAPs (40 CFR Parts 61 and 63)?	☒ Yes ☐ No
43. Does the application address whether the proposed project or the source could be a major project for Prevention of Significant Deterioration (PSD), 40 CFR 52.21?	☐ Yes ☐ No ☒ N/A
44. Does the application address for which pollutant(s) the proposed project or the source could be a major project for PSD, 40 CFR 52.21?	☐ Yes ☐ No ☒ N/A
45. Does the application address whether the proposed project or the source could be a major project for "Nonattainment New Source Review," (NA NSR), 35 IAC Part 203?	☐ Yes ☐ No ☒ N/A
46. Does the application address for which pollutant(s) the proposed project or the source could be a major project for NA NSR, 35 IAC Part 203?	☐ Yes ☐ No ☒ N/A
47. Does the application address whether the proposed project or the source could potentially be subject to federal Maximum Achievable Control Technology (MACT) standard under 40 CFR Part 63 for Hazardous Air Pollutants (HAP) and identify the standard that could be applicable?	☐ Yes ☐ No ☒ N/A* * Source not major ☒ Project not major ☐
48. Does the application identify the HAP(s) from the proposed project or the source that would trigger the applicability of a MACT standard under 40 CFR Part 63?	☐ Yes ☐ No ☒ N/A
49. Does the application include a summary of the current and the future potential emissions of the source after the proposed project has been completed for each criteria air pollutant and/or HAP (tons/year)?	☐ Yes ☐ No ☒ N/A* * Applicability of PSD, NA NSR or 40 CFR 63 not applicable to the source's emissions.
50. Does the application include a summary of the requested permitted annual emissions of the proposed project for the new and modified emission units (tons/year)?	☒ Yes ☐ No ☐ N/A* * Project does not involve an increase in emissions from new or modified emission units.
51. Does the application include a summary of the requested permitted production, throughput, fuel, or raw material usage limits that correspond to the annual emissions limits of the proposed project for the new and modified emission units?	☒ Yes ☐ No ☐ N/A* * Project does not involve an increase in emissions from new or modified emission units.
52. Does the application include sample calculations or methodology for the emission estimations and the requested emission limits?	☒ Yes ☐ No
53. Does the application address the relationships with and implications of the proposed project for the source's FESOP?	☐ Yes ☐ No ☒ N/A* *FESOP not yet issued.
54. If the application contains information that is considered a TRADE SECRET, has such information been properly marked and claimed and other requirements to perfect such a claim been satisfied in accordance with 35 IAC Part 130? Note: *Claimed information will not be legally protected from disclosure to the public if it is not properly claimed or does not qualify as trade secret information.	☐ Yes ☐ No ☒ N/A* * No information in the application is claimed to be a TRADE SECRET

Review Of Contents of the Application (continued)		
55. If the source is located in a county other than Cook County, are two separate copies of this application being submitted?	☒ Yes	☐ No
56. If the source is located in Cook County, are three separate copies of this application being submitted?	☒ Yes	☐ No
57. Does the application include a completed "FEE DETERMINATION FOR CONSTRUCTION PERMIT APPLICATION," Form 197-FEE, for the emission units and control equipment for which a permit for construction or modification is being sought?	☒ Yes	☐ No
58. Does the application include a check in the proper amount for payment of the Construction permit fee?	☒ Yes	☐ No

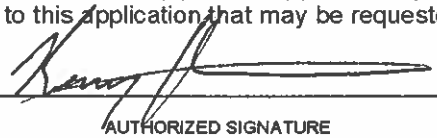
Note: Answering "No" to Items 36 through 58 may result in the application being deemed incomplete.

Signature Block

Pursuant to 35 IAC 201.159, all applications and supplements thereto shall be signed by the owner and operator of the source, or their authorized agent, and shall be accompanied by evidence of authority to sign the application. Applications without a signed certification will be deemed incomplete.

59. Authorized Signature:

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete and that I am a responsible official for the source, as defined by Section 39.5(1) of the Environmental Protection Act. In addition, the technical contact person identified above is authorized to submit (by hard copy and/or by electronic copy) any supplemental information related to this application that may be requested by the Illinois EPA.

BY: 

AUTHORIZED SIGNATURE

Plant Manager

TITLE OF SIGNATORY

Kenny Head

TYPED OR PRINTED NAME OF SIGNATORY

3/10/16

DATE

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
1021 NORTH GRAND AVENUE, EAST
SPRINGFIELD, ILLINOIS 62702

Page _____ of _____

* DATA AND INFORMATION PROCESS EMISSION SOURCE	

* THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER: Bunge North America	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER):
3. STREET ADDRESS OF EMISSION SOURCE: 321 E. North Street	4. CITY OF EMISSION SOURCE: Danville

GENERAL INFORMATION		
5. NAME OF PROCESS: Coarse Whole Grain Transfer	6. NAME OF EMISSION SOURCE EQUIPMENT: WG260 Lift Receiver	
7. EMISSION SOURCE EQUIPMENT MANUFACTURER:	8. MODEL NUMBER:	9. SERIAL NUMBER: NA
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: WG260 Lift Receiver		
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY ANOTHER APPLICATION, IDENTIFY THE APPLICATION):		
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 6 DAYS/WK 50 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR	
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 25 % MAR-MAY 25 % JUN-AUG 25 % SEPT-NOV 25 %		

INSTRUCTIONS
1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.
2. COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
3. EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES
5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS
AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE, OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD. AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATING TIME. AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.
MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FOR THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

RAW MATERIAL INFORMATION		
NAME OF RAW MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
20a. WG260 Coarse Whole Grain	b. 3000 LB/HR	c. 3000 LB/HR
21a.	b. LB/HR	c. LB/HR
22a.	b. LB/HR	c. LB/HR
23a.	b. LB/HR	c. LB/HR
24a.	b. LB/HR	c. LB/HR

PRODUCT INFORMATION		
NAME OF PRODUCT	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
30a. WG260 Coarse Whole Grain	b. 3000 LB/HR	c. 3000 LB/HR
31a.	b. LB/HR	c. LB/HR
32a.	b. LB/HR	c. LB/HR
33a.	b. LB/HR	c. LB/HR
34a.	b. LB/HR	c. LB/HR

WASTE MATERIAL INFORMATION		
NAME OF WASTE MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
40a. None	b. LB/HR	c. LB/HR
41a.	b. LB/HR	c. LB/HR
42a.	b. LB/HR	c. LB/HR
43a.	b. LB/HR	c. LB/HR
44a.	b. LB/HR	c. LB/HR

*FUEL USAGE INFORMATION		
FUEL USED	TYPE	HEAT CONTENT
50a. NATURAL GAS ☐	b. ----------	c. 1000 BTU/SCF
OTHER GAS ☐		BTU/SCF
OIL ☐		BTU/GAL
COAL ☐		BTU/LB
OTHER ☐		BTU/LB
d. AVERAGE FIRING RATE PER IDENTICAL SOURCE: BTU/HR	e. MAXIMUM FIRING RATE PER IDENTICAL SOURCE: BTU/HR	

*THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE, E. G. GAS IN A DRYER, OR COAL IN A MELT FURNACE.

*EMISSION INFORMATION

51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): One

AVERAGE OPERATION

CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE		METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a. 0.020 GR/SCF	b. 0.117 LB/HR	c. Enginering Estimate
CARBON MONOXIDE	53a. PPM (VOL)	b. LB/HR	c.
NITROGEN OXIDES	54a. PPM (VOL)	b. LB/HR	c.
ORGANIC MATERIAL	55a. PPM (VOL)	b. LB/HR	c.
SULFUR DIOXIDE	56a. PPM (VOL)	b. LB/HR	c.
**OTHER (SPECIFY)	57a. PPM (VOL)	b. LB/HR	c.

MAXIMUM OPERATION

CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE		METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a. 0.020 GR/SCF	b. 0.117 LB/HR	c. Engineering Estimate
CARBON MONOXIDE	59a. PPM (VOL)	b. LB/HR	c.
NITROGEN OXIDES	60a. PPM (VOL)	b. LB/HR	c.
ORGANIC MATERIAL	61a. PPM (VOL)	b. LB/HR	c.
SULFUR DIOXIDE	62a. PPM (VOL)	b. LB/HR	c.
**OTHER (SPECIFY)	63a. PPM (VOL)	b. LB/HR	c.

*ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
**"OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

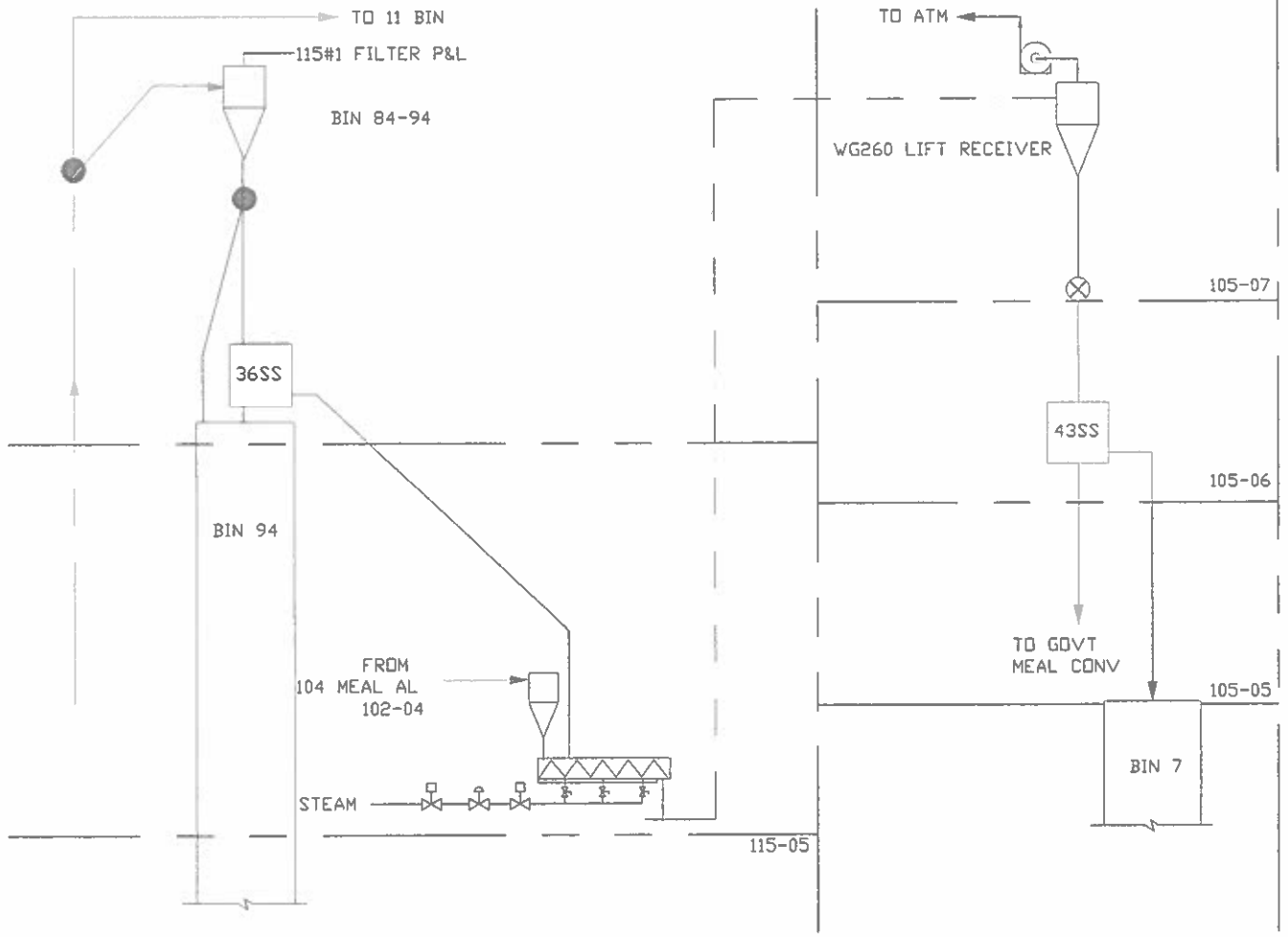
64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: WG260 Lift Receiver

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.): Horizotal, unobstructed discharge

66. EXIT HEIGHT ABOVE GRADE: 112 ft	67. EXIT DIAMETER: 8 in
68. GREATEST HEIGHT OF NEARBY BUILDINGS: 114 ft	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 513 ft

AVERAGE OPERATION	MAXIMUM OPERATION
70. EXIT GAS TEMPERATURE: 120 °F	72. EXIT GAS TEMPERATURE: 120 °F
71. GAS FLOW RATE THROUGH EACH EXIT: 682 ACFM	73. GAS FLOW RATE THROUGH EACH EXIT: 682 ACFM

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.



(N) - NEW
(EX) - EXISTING

REVISIONS			
NO.	REMARKS	DATE	BY

FLOW DIAGRAM WG PERMIT
FOR
WHOLE GRAIN AIR PERMIT

BUNGE
DANVILLE, ILLINOIS

JOB
BLDG.
DRAWN AL'S
TRACED
PLOTTED
APPROVED
DATE 3/31/16
SCALE NONE
DRWG.WG PERMIT

R001188

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JEREMY STANGER
2174439805
BUNGE MILLING
321 E NORTH ST
DANVILLE IL 61832

0.0 LBS LTR 1 OF 1

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PERMIT SECTION
DIVISION OF AIR POLLUTION CONTROL
MR RAY PILAPIL
IL ENVIRONMENTAL PROTECT AGENCY
1021 NORTH GRAND AVE EAST
SPRINGFIELD IL 62702-4059

IL 627 0-01

UPS NEXT DAY AIR 1

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UIS 18.0.33. WNTNV50 72.0A 01/2016

DIVISION OF AIR POLLUTION CONTROL
1021 N GRAND AVE E
SPRINGFIELD IL 62702

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1Z618039019610 8567

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

BRUCE RAUNER, GOVERNOR LISA BONNETT, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

Bunge North America, Inc.
Attn: Kenny Head
321 East North Street
Danville, Illinois 61832

Application No.: 16030026 I.D. No.: 183020ABT
Applicant's Designation: Date Received: March 15, 2016
Subject: Lift Receiver for Coarse Whole Grain Transfer
Date Issued: May 19, 2016
Location: 321 East North Street, Danville, Vermilion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of one (1) pneumatic transfer receiver as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the construction of the emission units listed above not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM) and Particulate Matter less than 10 microns (PM_{10}) from the above-listed equipment below the levels that would trigger the applicability of these rules.

b. Operation of the equipment listed above is allowed under this permit until final action is taken on the Federally Enforceable State Operating Permit (FESOP) application for this source.

2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

3. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

4a. Emissions and operation of the emission units of the flour handling system shall not exceed the following limits:

			Emissions	
Item of Equipment	(scfm)	(gr/dscf)	PM/PM_{10} (Lb/Hr)	(Tons/Yr)
Whole Grain Pneumatic Product Transfer Receiver	682	0.02	0.12	0.53

These limits are based on exhaust air flow rate, grain loading, and information in the application. The limits on PM_{10} also limit the emissions of $PM_{2.5}$.

b. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

5a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the emission units and air pollution control equipment:

A. Records for periodic inspection of the emission units and pollution control equipment with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The maximum blower rate in scfm each month for the pneumatic transfer receiver; and

iii. Monthly and annual PM and PM_{10} emissions from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be available for inspections and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

6a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this, please call Mike Dragovich at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:MJD:jws

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

   a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

   b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

   c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

   d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Kras, Kim

From: DoNotReply.EJRequest@illinois.gov
Sent: Friday, February 17, 2017 11:21 AM
To: Bernoteit, Bob; Rupel, Elizabeth; Frost, Brad; Pressnall, Chris; Barria, German
Subject: Request for EJ Review for Bunge Grain Milling Inc | 183020ABT | 96020027 | AIR

A new request has been submitted to the EJ Outreach database.

Source Name: Bunge Grain Milling Inc

Activity/Subactivity Type: Permit / FESOP

Decision Due Date:

Reviewer - When the permit is ready to be issued, click this link to view the request. When viewing the request, click the button labeled 'Ready for issuance' to mark the record for EJ Release.

Kras, Kim

From: DoNotReply.EJRequest@illinois.gov
Sent: Friday, March 10, 2017 10:51 AM
To: Rupel, Elizabeth; Frost, Brad; Pressnall, Chris; Barria, German
Subject: Outreach Status Change for Bunge Grain Milling Inc | 183020ABT | 96020027 | AIR

The EJ source (Bunge Grain Milling Inc) has moved forward in the outreach process on 03/10/2017.

The status has changed from *Review Pending* to *Outreach In Progress*.

EJ Review Request #1464

Site/Facility Information

Site Name: Bunge Grain Milling Inc Site ID: 170000152233
Bureau Site ID: 183020ABT Bureau: AIR
Address: 321 E. North Street EJ Status: 3 - EJ Area, Both Minority & Low Income
City/State/Zip: Danville, Illinois 61832
Contact Name: Jim Burris Contact Title:
Contact Address: 321 E. North Street
Contact City/State/Zip: Danville, Illinois 61832
Phone: 314-292-2937 Email: james.burris@bunge.com

Application Information

Reference Number: 96020027
Activity Type: Permit Activity Subtype: FESOP
Application Scope/Description:
Corn Mill & Grain Elevator
Other Relevant Information:
Initial FESOP Application.
Request Submitted: 2/17/2017 Submitted by: Bob.Bernoteit
Application Received: 12/5/2011 Decision Due:
Reviewer Name: German.Barria Review Status: Review Pending
Review Status Notes:

R001198

183 020 ABT
96 02 0027

BUNGE

April 25, 2018

Division of Air Pollution Control - Permit Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702

Environmental Protection Agency
BUREAU OF AIR
MAY 14 2018
STATE OF ILLINOIS
RECEIVED

Re: Construction Permit Application (FESOP Source)
Bunge – Danville Facility
Source ID No. 183020ABT

Dear Sir or Madame:

Please find enclosed two copies of our construction permit application to install a three new emission sources at our facility in Danville, Illinois. After the project is complete a separate application will be submitted to update our FESOP application.

A check for $6,000 is enclosed with this application package. The application package includes the following:

- A project description
- A summary of emission calculations
- A Form 197-FEE, Fee Determination Form
- A Permit Application Fee of $6,000 (Check made payable to Illinois EPA, Division of Air Pollution Control-Permit Section)
- A Form APC628, Construction Permit Application for a FESOP Source,
- Three Form APC220, Emission Source Information (one form for each new emission source), and
- Three process flow diagrams

Please review the enclosed construction permit application. If you have any questions or require any further information please contact Jim Burris at (314) 292-2937 or by email at james.burris@bunge.com.

Sincerely,

Kenny Head
Plant Manager

Enclosure

Bunge North America, Inc.
321 E. North Street
Danville, IL 61832
Phone: (217) 442-1800 **Fax:** (217) 443-9782

Bunge North America
Extrusion System Upgrade - Danville

Project Description

Currently the facility has an extrusion system which blends low concentration acid with corn flour or meal and processes it via an extruder to modify the starch. The extrusion pellets are ground to the desired size starch powder and then transferred to storage. The end product is a specialty starch binder which is sold to wallboard fabricators to aid in bonding the paper to the gypsum. This specialty starch binder is called USG. Bunge expects an increase in demand for this product and needs to upgrade the extrusion system by adding a second extrusion line to accommodate to the increase in demand. The project has two parts.

The first part involves making room for the new USG equipment. To do this, two existing PCM hammermills and their four lift line filters will be removed and replaced with a single, new combined PCM hammermill and filter system. The two existing PCM hammermills have throughput capacity of 5,000 lb/hr each (10,000 lb/hr combined) and the new hammermill will have a capacity of 10,000 lb/hr. PCM is another specialty starch product produced at the mill and unrelated to the USG product. There is no increase in throughput. This is essentially a replacement in kind.

The second part involves installing a second USG extrusion line. The second line is designed to have a throughput capacity of 13,000 lb/hr. It will include two new emission sources, a USG hammermill and filter system and a USG extruder pellet transfer collection cyclone.

New and Removed Emission Units – Description and Emission Calculations

As mentioned above this project involves removing four existing emission sources and replacing them with a single emission source to make room for a second USG extrusion line. The four emission sources that will be removed are the four hammermill lift line filters. The new emission source is the new hammermill product collection filter. The four lift filters have an air flow rate of 2,143 cfm each (8,572 cfm total). The new hammermill filter will have an air flow rate of 7,200 cfm.

The new USG line will add two new emission sources, a USG hammermill product collection filter and a USG extruder pellet transfer collection cyclone.

Emissions from this project are summarized in the table below.

Table 1. Maximum (8,760 hr/year) Actual Expected Emissions.

Emission Unit	Emission Unit ID No.	New or Removed	PM (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)
#2 PCM Hammermill Filter	78-03:20	Removed	0.04	0.04	0.02	0.16	0.16	0.08
#3 PCM Hammermill Filter	78-03:23	Removed	0.04	0.04	0.02	0.16	0.16	0.08
#4 PCM Hammermill Filter	78-03:26	Removed	0.04	0.04	0.02	0.16	0.16	0.08
#5 PCM Hammermill Filter	78-03:29	Removed	0.04	0.04	0.02	0.16	0.16	0.08
New PCM Hammermill Filter	78-03:11	New	0.12	0.12	0.06	0.54	0.54	0.27
New USG Hammermill Filter	78-00:27	New	0.12	0.12	0.06	0.54	0.54	0.27
New USG Extruder Transfer Collection Cyclone	78-08:22	New	0.69	0.69	0.48	3.00	3.00	2.10
Total Increase in Emissions			0.77	0.77	0.52	3.44	3.44	2.32

Danville, IL

PCM Hammermill Aspiration

78-03:11

Grain Loading	0.002 PM	0.002 PM10	0.001 PM2.5	grain/dscf
Fan Flow Rate	7,200 scfm			

Grain Loading based on expected exhaust concentration

Hourly emission rate = grain/dscf x scf/min x 60 min/hr x 1 lb/7000 grain
Annual = Max hourly x 8760 hr/yr x 1 ton/2000 lbs

	PM	PM10	PM2.5	Hrs/Year
Max Hourly (lb/hr)	0.12	0.12	0.06	
Max Annual (tpy)	0.54	0.54	0.27	8760
Avg Hourly (lb/hr)	0.12	0.12	0.06	
Avg Annual (tpy)	0.50	0.50	0.25	8136

USG Hammermill Aspiration

78-08:27

Grain Loading	0.002 PM	0.002 PM10	0.001 PM2.5	grain/dscf
Fan Flow Rate	7,200 scfm			

Grain loading based on manufacturer literature.

Hourly emission rate = grain/dscf x scf/min x 60 min/hr x 1 lb/7000 grain
Annual = Max hourly x 8760 hr/yr x 1 ton/2000 lbs

	PM	PM10	PM2.5	Hrs/Year
Max Hourly (lb/hr)	0.12	0.12	0.06	
Max Annual (tpy)	0.54	0.54	0.27	8760
Avg Hourly (lb/hr)	0.12	0.12	0.06	
Avg Annual (tpy)	0.50	0.50	0.25	8136

USG Transfer Collection

78-08:22

Grain Loading	0.020 PM	0.020 PM10	0.014 PM2.5	grain/dscf
Fan Flow Rate	4,000 scfm			

Grain loading based on manufacturer literature.

Hourly emission rate = grain/dscf x scf/min x 60 min/hr x 1 lb/7000 grain
Annual = Max hourly x 8760 hr/yr x 1 ton/2000 lbs

	PM	PM10	PM2.5	Hrs/Year
Max Hourly (lb/hr)	0.69	0.69	0.48	
Max Annual (tpy)	3.00	3.00	2.10	8760
Avg Hourly (lb/hr)	0.69	0.69	0.48	
Avg Annual (tpy)	2.79	2.79	1.95	8136

Old PCM Hammermill Aspiration
78-03:20, 23, 26, 29

Grain Loading	0.002 PM	0.002	0.001 PM2.5	grain/dscf
Fan Flow Rate	2,143 scfm			

Grain Loading based on expected exhaust concentration

Hourly emission rate = grain/dscf x scf/min x 60 min/hr x 1 lb/7000 grain
Annual = Max hourly x 8760 hr/yr x 1 ton/2000 lbs

	PM	PM10	PM2.5	Hrs/Year
Max Hourly (lb/hr)	0.04	0.04	0.02	
Max Annual (tpy)	0.16	0.16	0.08	8760
Avg Hourly (lb/hr)	0.04	0.04	0.02	
Avg Annual (tpy)	0.15	0.15	0.07	8136

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STATE OF ILLINOIS
MAY 14 2018
Environmental Protection Agency
BUREAU OF AIR

Illinois Environmental Protection Agency

Bureau of Air • 1021 North Grand Avenue East • P.O. Box 19506 • Springfield • Illinois • 62794-9506

FEE DETERMINATION FOR CONSTRUCTION PERMIT APPLICATION

FOR AGENCY USE ONLY

ID Number: 183 020 ABT
Permit #: 18 05 0016
$ 60000
☑ Complete ☐ Incomplete
Date Complete: 5-10-18
Check Number: 35213287
Account Name: Bunge

This form is to be used to supply fee information that must accompany all construction permit applications. This application must include payment in full to be deemed complete. Make check or money order payable to the Illinois Environmental Protection Agency, Division of Air Pollution Control - Permit Section at the above address. Do NOT send cash. Refer to instructions (197-INST) for assistance.

Source Information

1. Source Name: Bunge North America, Inc.
2. Project Name: Extrusion System Upgrade
3. Source ID #: (if applicable) 183020ABT
4. Contact Name: Jim Burris
5. Contact Phone #: 314 292-2937

Fee Determination

6. The boxes below are automatically calculated.

Section 1 Subtotal $0.00 + Section 2, 3 or 4 Subtotal $6,000.00 = $6,000.00 Grand Total

Section 1: Status of Source/Purpose of Submittal

7. Your application will fall under only one of the following five categories described below. Check the box that applies. Proceed to applicable sections. For purposes of this form:

- **Major Source** is a source that is required to obtain a CAAPP permit.
- **Synthetic Minor Source** is a source that has taken limits on potential to emit in a permit to avoid CAAPP permit requirements (e.g.,FESOP).
- **Non-Major Source** is a source that is not a major or synthetic minor source.

☑ Existing source without status change or with status change from synthetic minor to major source or vice versa. Proceed to Section 2.

☐ Existing non-major source that will become synthetic minor to major source. Proceed to Section 4.

☐ New major or synthetic minor source. Proceed to Section 4.

☐ New non-major source. Proceed to Section 3.

☐ AGENCY ERROR. If this is a timely request to correct an issued permit that involves only an agency error and if the request is received within the deadline for a permit appeal to the Pollution Control Board. Skip Sections 2, 3 and 4. Proceed directly to Section 5.

$0.00
Section 1 Subtotal

This agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 ET SEQ. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Section 2: Special Case Filing Fee

8. **Filing Fee.** If the application only addresses one or more of the following, check the appropriate boxes, skip Sections 3 and 4 and proceed directly to Section 5. Otherwise, proceed to Section 3 or 4 as appropriate.

Addition or replacement of control devices on permitted units.
Pilot projects/trial burns by a permitted unit
Land remediation projects
Revisions related to methodology or timing for emission testing
Minor administrative-type change to a permit

Section 3: Fees for Current or Projected Non-Major Sources

9.	This application consists of a single new emission unit or no more than two modified emission units. ($500 fee)	9.
10.	This application consists of more than one new emission unit or more than two modified units. ($1,000 fee)	10.
11.	This application consists of a new source or emission unit subject to Section 39.2 of the Act (i.e., Local Siting Review); a commercial incinerator or a municipal waste, hazardous waste, or waste tire incinerator; a commercial power generator; or an emission unit designated as a complex source by agency rulemaking. ($15,000 fee)	11.
12.	A public hearing is held (see instructions). ($10,000 fee)	12.
13.	Section 3 subtotal. (lines 9 through 12 - entered on page 1)	13. $0.00

Section 4: Fees for Current or Projected Major or Synthetic Minor Sources

Application contains modified emission units only	14. For the first modified emission unit, enter $2,000.	
	15. Number of additional modified emission units = x $1,000.	15. $0.00
	16. Line 14 plus line 15, or $5,000, whichever is less.	16. $0.00
Application contains new and/or modified emission units	17. For the first new emission unit, enter $4,000.	17. $4,000.00
	18. Number of additional new and/or modified emission units = 2 x $1,000.	18. $2,000.00
	19. Line 17 plus line 18, or $10,000, whichever is less.	19. $6,000.00
Application contains netting exercise	20. Number of individual pollutants that rely on a netting exercise or contemporaneous emissions decrease to avoid application of PSD or nonattainment area NSR = _____ x $3,000.	20. $0.00
Additional Supplemental Fees	21. If the new source or emission unit is subject to Section 39.2 of the Act (i.e. siting); a commercial incinerator or other municipal waste, hazardous waste, or waste tire incinerator; a commercial power generator; or one or more other emission units designated as a complex source by Agency rulemaking, enter $25,000.	21.
	22. If the source is a new major source subject to PSD, enter $12,000.	22.
	23. If the project is a major modification subject to PSD, enter $6,000.	23.
	24. If this is a new major source subject to nonattainment area (NAA) NSR, enter $20,000.	24.
	25. If this is a major modification subject to NAA NSR, enter $12,000.	25.
	26. If the application involves a determination of MACT for a pollutant and the project is not subject to BACT or LAER for the related pollutant under PSD or NSR (e.g., VOM for organic HAP), enter $5,000 per unit for which a determination is requested or otherwise required. _____ x $5,000.	26. $0.00
	27. If a public hearing is held (see instructions), enter $10,000.	27.
28. Section 4 subtotal (line 16 and lines 19 through 28) to be entered on page1		28. $6,000.00

Section 5: Certification

NOTE: Applications without a signed certification will be deemed incomplete.

29. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the information contained in this fee application form is true, accurate and complete.

by: _____ Plant Manager

Signature — Title of Signatory

Kenny Head — 5/2/18

Typed or Printed Name of Signatory — Date

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STATE OF ILLINOIS
MAY 14 2018
Environmental Protection Agency
BUREAU OF AIR

Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Construction Permit Application For a FESOP Source (FORM APC628)

For Illinois EPA Use only
BOA ID No.: 183020ABT
Application No.:
Date Received: 5-14-18

This form is to be used to supply information to obtain a construction permit for a proposed project involving a Federally Enforceable State Operating Permit (FESOP) or Synthetic Minor source, including construction of a new FESOP source. Other necessary information must accompany this form as discussed in the "General Instructions For Permit Applications," Form APC-201.

Proposed Project

1. Working Name of Proposed Project:
   Extrusion System Upgrade
2. Is the project occurring at a source that already has a permit from the Bureau of Air (BOA)?
   ☐ No ☒ Yes If Yes, provide BOA ID Number: 183020ABT
3. Does this application request a revision to an existing construction permit issued by the BOA?
   ☒ No ☐ Yes If Yes, provide Permit Number: __ __ __ __ __ __ __ __
4. Does this application request that the new/modified emission units be incorporated into an existing FESOP issued by the BOA?
   ☐ No ☒ Yes If Yes, provide Permit Number: Not Yet Issued

Source Information

5. Source name:*
   Bunge North America, Inc.
6. Source street address:*
   321 E. North Street

7. City:	8. County:	9. Zip code:
Danville	Vermillion	61832

ONLY COMPLETE THE FOLLOWING FOR A SOURCE WITHOUT AN ID NUMBER.

10. Is the source located within city limits? ☐ Yes ☐ No
    If no, provide Township Name:

11. Description of source and product(s) produced:	12. Primary Classification Code of source: SIC: __ __ __ __ or NAICS: __ __ __ __ __ __
13. Latitude (DD:MM:SS.SSSS):	14. Longitude (DD:MM:SS.SSSS):

* If this information different than previous information, then complete a new Form 200-CAAPP to change the source name in initial FESOP application for the source or Form APC-620 for Air Permit Name and/or Ownership Change if the FESOP has been previously issued.

Applicant Information

15. Who is the applicant? ☒ Owner ☐ Operator	16. All correspondence to: (check one) ☐ Owner ☐ Operator ☒ Source
17. Applicant's FEIN: 37-0614689	18. Attention name and/or title for written correspondence: Kenny Head

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Owner Information*		
19. Name: Bunge North America, Inc.		
20. Address: 11720 Borman Drive		
21. City: St Louis	22. State: MO	23. Zip code: 63146

* If this information different than previous information, then complete Form 272-CAAPP for a Request for Ownership Change for CAAPP Permit for an initial FESOP application for the source or Form APC-620 for Air Permit Name and/or Ownership Change if the FESOP has been previously issued.

Operator Information (If Different from Owner)*		
24. Name Bunge North America, Inc.		
25. Address: 321 E. North Street		
26. City: Danville	27. State: IL	28. Zip code: 61832

* If this information different than previous information, then complete a new Form 200-CAAPP to change the source name in initial FESOP application for the source or Form APC-620 for Air Permit Name and/or Ownership Change if the FESOP has been previously issued.

Technical Contacts for Application	
29. Preferred technical contact: (check one) ☒ Applicant's contact ☐ Consultant	
30. Applicant's technical contact person for application: Jim Burris	
31. Contact person's telephone number 314 292-2937	32. Contact person's email address: james.burris@bunge.com
33. Applicant's consultant for application:	
34. Consultant's telephone number:	35. Consultant's email address:

Review Of Contents of the Application		
36. Is the emission unit covered by this application already constructed? If "yes", provide the date construction was completed: Note: The Illinois EPA is unable to issue a construction permit for a emission unit that has already been constructed.	☐ Yes	☒ No
37. Does the application include a narrative description of the proposed project?	☒ Yes	☐ No
38. Does the application contain a list or summary that clearly identifies the emission units and air pollution control equipment that are part of the project?	☒ Yes	☐ No
39. Does the application include process flow diagram(s) for the project showing new and modified emission units and control equipment and related existing equipment and their relationships?	☒ Yes	☐ No
40. If the project is at a source that has not previously received a permit from the BOA, does the application include a source description, plot plan and site map?	☒ Yes	☐ No

Review Of Contents of the Application (continued)	
41. Does the application include relevant information for the proposed project as requested on Illinois EPA, BOA application forms (or otherwise contain all the relevant information)?	☒ Yes ☐ No
42. Does the application identify and address all applicable or potentially applicable emissions standards, including: a. State emission standards (35 IAC Chapter I, Subtitle B); b. Federal New Source Performance Standards (40 CFR Part 60); c. Federal standards for HAPs (40 CFR Parts 61 and 63)?	☒ Yes ☐ No
43. Does the application address whether the proposed project or the source could be a major project for Prevention of Significant Deterioration (PSD), 40 CFR 52.21?	☐ Yes ☐ No ☒ N/A
44. Does the application address for which pollutant(s) the proposed project or the source could be a major project for PSD, 40 CFR 52.21?	☐ Yes ☐ No ☒ N/A
45. Does the application address whether the proposed project or the source could be a major project for "Nonattainment New Source Review," (NA NSR), 35 IAC Part 203?	☐ Yes ☐ No ☒ N/A
46. Does the application address for which pollutant(s) the proposed project or the source could be a major project for NA NSR, 35 IAC Part 203?	☐ Yes ☐ No ☒ N/A
47. Does the application address whether the proposed project or the source could potentially be subject to federal Maximum Achievable Control Technology (MACT) standard under 40 CFR Part 63 for Hazardous Air Pollutants (HAP) and identify the standard that could be applicable?	☐ Yes ☐ No ☒ N/A* * Source not major ☒ Project not major ☐
48. Does the application identify the HAP(s) from the proposed project or the source that would trigger the applicability of a MACT standard under 40 CFR Part 63?	☐ Yes ☐ No ☒ N/A
49. Does the application include a summary of the current and the future potential emissions of the source after the proposed project has been completed for each criteria air pollutant and/or HAP (tons/year)?	☐ Yes ☐ No ☒ N/A* * Applicability of PSD, NA NSR or 40 CFR 63 not applicable to the source's emissions.
50. Does the application include a summary of the requested permitted annual emissions of the proposed project for the new and modified emission units (tons/year)?	☒ Yes ☐ No ☐ N/A* * Project does not involve an increase in emissions from new or modified emission units.
51. Does the application include a summary of the requested permitted production, throughput, fuel, or raw material usage limits that correspond to the annual emissions limits of the proposed project for the new and modified emission units?	☒ Yes ☐ No ☐ N/A* * Project does not involve an increase in emissions from new or modified emission units.
52. Does the application include sample calculations or methodology for the emission estimations and the requested emission limits?	☒ Yes ☐ No
53. Does the application address the relationships with and implications of the proposed project for the source's FESOP?	☐ Yes ☐ No ☒ N/A* *FESOP not yet issued.
54. If the application contains information that is considered a TRADE SECRET, has such information been properly marked and claimed and other requirements to perfect such a claim been satisfied in accordance with 35 IAC Part 130? Note: "Claimed information will not be legally protected from disclosure to the public if it is not properly claimed or does not qualify as trade secret information.	☐ Yes ☐ No ☒ N/A* * No information in the application is claimed to be a TRADE SECRET

Review Of Contents of the Application (continued)		
55. If the source is located in a county other than Cook County, are two separate copies of this application being submitted?	☒ Yes	☐ No
56. If the source is located in Cook County, are three separate copies of this application being submitted?	☒ Yes	☐ No
57. Does the application include a completed "FEE DETERMINATION FOR CONSTRUCTION PERMIT APPLICATION," Form 197-FEE, for the emission units and control equipment for which a permit for construction or modification is being sought?	☒ Yes	☐ No
58. Does the application include a check in the proper amount for payment of the Construction permit fee?	☒ Yes	☐ No

Note: Answering "No" to Items 36 through 58 may result in the application being deemed incomplete.

Signature Block

Pursuant to 35 IAC 201.159, all applications and supplements thereto shall be signed by the owner and operator of the source, or their authorized agent, and shall be accompanied by evidence of authority to sign the application. Applications without a signed certification will be deemed incomplete.

59. Authorized Signature:

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete and that I am a responsible official for the source, as defined by Section 39.5(1) of the Environmental Protection Act. In addition, the technical contact person identified above is authorized to submit (by hard copy and/or by electronic copy) any supplemental information related to this application that may be requested by the Illinois EPA.

BY: Kenny Head — Plant Manager

AUTHORIZED SIGNATURE — TITLE OF SIGNATORY

Kenny Head — 5/2/18

TYPED OR PRINTED NAME OF SIGNATORY — DATE

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
1021 NORTH GRAND AVENUE, EAST
SPRINGFIELD, ILLINOIS 62702

Page _____ of _____

* DATA AND INFORMATION PROCESS EMISSION SOURCE	

* THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED

1. NAME OF PLANT OWNER Bunge North America, Inc.	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER)
3. STREET ADDRESS OF EMISSION SOURCE: 321 E. North Street	4. CITY OF EMISSION SOURCE: Danville

GENERAL INFORMATION		
5. NAME OF PROCESS: Extrusion Process	6. NAME OF EMISSION SOURCE EQUIPMENT: PCM Hammermill Collection Filter	
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: KICE	8. MODEL NUMBER VS64-8	9. SERIAL NUMBER NA
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: KICE VS64-8 03:11		
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY ANOTHER APPLICATION, IDENTIFY THE APPLICATION):		
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 6.5 DAYS/WK 52 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR	
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 25 % MAR-MAY 25 % JUN-AUG 25 % SEPT-NOV 25 %		

INSTRUCTIONS
1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.
2. COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
3. EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES
5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201

DEFINITIONS
AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE, OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATING TIME. AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.
MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FOR THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD. MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION. MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

RAW MATERIAL INFORMATION		
NAME OF RAW MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
20a. Corn Flour/Meal	b. 10,000 LB/HR	c. 10,000 LB/HR
21a.	b. LB/HR	c. LB/HR
22a.	b. LB/HR	c. LB/HR
23a.	b. LB/HR	c. LB/HR
24a.	b. LB/HR	c. LB/HR

PRODUCT INFORMATION		
NAME OF PRODUCT	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
30a. PCM Specialty Starch	b. 10,000 LB/HR	c. 10,000 LB/HR
31a.	b. LB/HR	c. LB/HR
32a.	b. LB/HR	c. LB/HR
33a.	b. LB/HR	c. LB/HR
34a.	b. LB/HR	c. LB/HR

WASTE MATERIAL INFORMATION		
NAME OF WASTE MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
40a. None	b. LB/HR	c. LB/HR
41a.	b. LB/HR	c. LB/HR
42a.	b. LB/HR	c. LB/HR
43a.	b. LB/HR	c. LB/HR
44a.	b. LB/HR	c. LB/HR

*FUEL USAGE INFORMATION			
FUEL USED		TYPE	HEAT CONTENT
50a. NATURAL GAS	☐	b. ----------	c. 1000 BTU/SCF
OTHER GAS	☐		BTU/SCF
OIL	☐		BTU/GAL
COAL	☐		BTU/LB
OTHER	☐		BTU/LB
d. AVERAGE FIRING RATE PER IDENTICAL SOURCE: BTU/HR		e. MAXIMUM FIRING RATE PER IDENTICAL SOURCE: BTU/HR	

*THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE, E. G. GAS IN A DRYER, OR COAL IN A MELT FURNACE.

*EMISSION INFORMATION

51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED):
One

AVERAGE OPERATION

CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE		METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a. 0.002 GR/SCF	b. LB/HR	c. Stack Test Data on Similar Source
CARBON MONOXIDE	53a. PPM (VOL)	b. LB/HR	c.
NITROGEN OXIDES	54a. PPM (VOL)	b. LB/HR	c.
ORGANIC MATERIAL	55a. PPM (VOL)	b. LB/HR	c.
SULFUR DIOXIDE	56a. PPM (VOL)	b. LB/HR	c.
**OTHER (SPECIFY)	57a. PPM (VOL)	b. LB/HR	c.

MAXIMUM OPERATION

CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE		METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a. GR/SCF	b. LB/HR	c.
CARBON MONOXIDE	59a. PPM (VOL)	b. LB/HR	c.
NITROGEN OXIDES	60a. PPM (VOL)	b. LB/HR	c.
ORGANIC MATERIAL	61a. PPM (VOL)	b. LB/HR	c.
SULFUR DIOXIDE	62a. PPM (VOL)	b. LB/HR	c.
**OTHER (SPECIFY)	63a. PPM (VOL)	b. LB/HR	c.

*ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
**"OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:
KICE VS64-8 03:11

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

66. EXIT HEIGHT ABOVE GRADE: 18ft	67. EXIT DIAMETER: 30n
68. GREATEST HEIGHT OF NEARBY BUILDINGS: 114ft	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 760ft
AVERAGE OPERATION	MAXIMUM OPERATION
70. EXIT GAS TEMPERATURE: 100 °F	72. EXIT GAS TEMPERATURE: 100 °F
71. GAS FLOW RATE THROUGH EACH EXIT: 7,200 ACFM	73. GAS FLOW RATE THROUGH EACH EXIT: 7,200 ACFM

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

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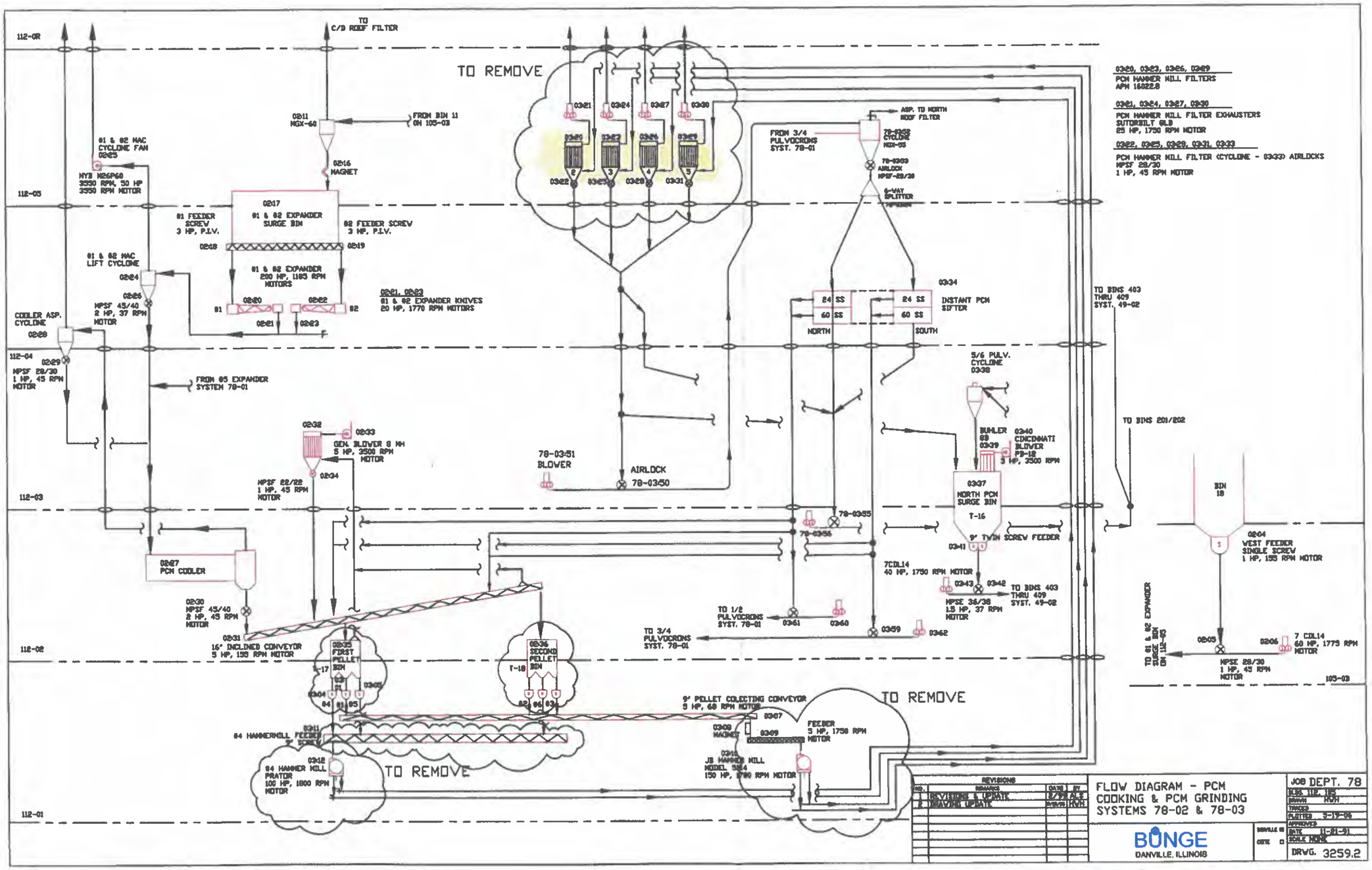
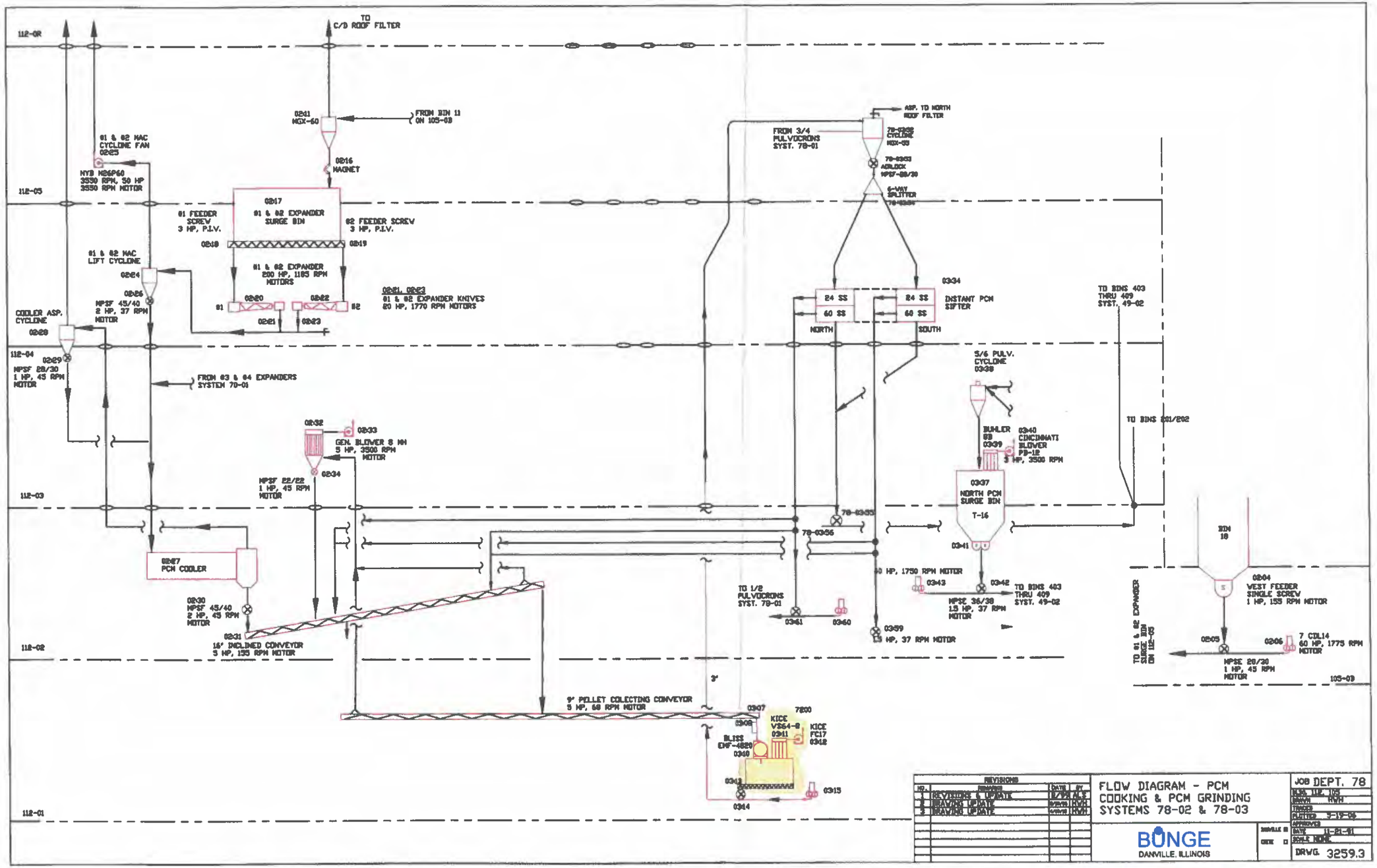

TO REMOVE
TO C/B ROOF FILTER
112-06
112-05
112-04
112-03
112-02
112-01
01 & 02 MAC CYCLONE FAN 0225
MYB MSSP60 3550 RPM, 50 HP 3550 RPM MOTOR
0211 MGX-60
FROM BIN 11 ON 105-03
0216 MAGNET
0217 01 & 02 EXPANDER SURGE BIN
01 FEEDER SCREW 3 HP, P.I.V.
02 FEEDER SCREW 3 HP, P.I.V.
0218
0219
01 & 02 EXPANDER 200 HP, 1185 RPM MOTORS
0220
0222
01
02
0221
0223
0221, 0223 01 & 02 EXPANDER KNIVES 20 HP, 1770 RPM MOTORS
01 & 02 MAC LIFT CYCLONE
0224
0225
MPSF 45/40 2 HP, 37 RPM MOTOR
COOLER ASP. CYCLONE
0228
0229
MPSF 28/30 1 HP, 45 RPM MOTOR
FROM 05 EXPANDER SYSTEM 78-01
0232
0233
GEN. BLOWER 8 MH 5 HP, 3500 RPM MOTOR
MPSF 22/22 1 HP, 45 RPM MOTOR
0234
78-0351 BLOWER
AIRLOCK 78-0350
0321
0324
0327
0330
0322
0325
0328
0331
2
3
4
5
FROM 3/4 PULVOCRONS SYST. 78-01
ASP. TO NORTH ROOF FILTER
78-0358 CYCLONE MGX-05
78-0359 AIRLOCK MPSF-28/30
6-WAY SPLITTER
0320, 0323, 0326, 0329 PCM HAMMER MILL FILTERS APH 16022.8
0321, 0324, 0327, 0330 PCM HAMMER MILL FILTER EXHAUSTERS SUTORBILT GLB 25 HP, 1750 RPM MOTOR
0322, 0325, 0328, 0331, 0333 PCM HAMMER MILL FILTER (CYCLONE - 0333) AIRLOCKS MPSF 28/30 1 HP, 45 RPM MOTOR
24 SS
60 SS
NORTH
SOUTH
0334 INSTANT PCM SIFTER
TO BINS 403 THRU 409 SYST. 49-02
5/6 PULV. CYCLONE 0338
BUHLER 69 0339
0340 CINCINNATI BLOWER P9-18 3 HP, 3500 RPM
0337 NORTH PCM SURGE BIN T-16
9" TWIN SCREW FEEDER
0341
7CDL14 40 HP, 1750 RPM MOTOR
0343
0342
MPSE 36/36 15 HP, 37 RPM MOTOR
TO BINS 403 THRU 409 SYST. 49-02
TO BINS 201/202
BIN 18
0204 WEST FEEDER SINGLE SCREW 1 HP, 155 RPM MOTOR
TO 01 & 02 EXPANDER SURGE BIN 112-05
0205
0206
7 CDL14 60 HP, 1775 RPM MOTOR
MPSE 28/30 1 HP, 45 RPM MOTOR
103-03
78-0355
78-0356
TO 1/2 PULVOCRONS SYST. 78-01
0361
0360
0359
0362
TO 3/4 PULVOCRONS SYST. 78-01
0247 PCM COOLER
0230 MPSF 45/40 2 HP, 45 RPM MOTOR
0231 16" INCLINED CONVEYOR 5 HP, 155 RPM MOTOR
0235 FIRST PELLET BIN T-17
0236 SECOND PELLET BIN T-18
0304
0305
84
81
85
82
86
83
9" PELLET COLLECTING CONVEYOR 5 HP, 68 RPM MOTOR
0307
0308 MAGNET
0309
FEEDER 3 HP, 1750 RPM MOTOR
0310 JB HAMMER MILL MODEL 5864 150 HP, 3590 RPM MOTOR
TO REMOVE
TO REMOVE
84 HAMMERMILL FEEDER SCREW 0311
0312 84 HAMMER MILL PRATOR 100 HP, 1800 RPM MOTOR
REVISIONS
NO. REMARKS DATE BY
1 REVISIONS & UPDATE 12/28/95 AKE
2 DRAWING UPDATE 5/19/96 RWH
FLOW DIAGRAM - PCM COOKING & PCM GRINDING SYSTEMS 78-02 & 78-03
BUNGE DANVILLE, ILLINOIS
JOB DEPT. 78
BLDG. 112, 105
DRAWN RWH
TRACED
PLOTTED 5-19-96
APPROVED
DATE 11-21-91
SCALE NONE
DRWG. 3259.2



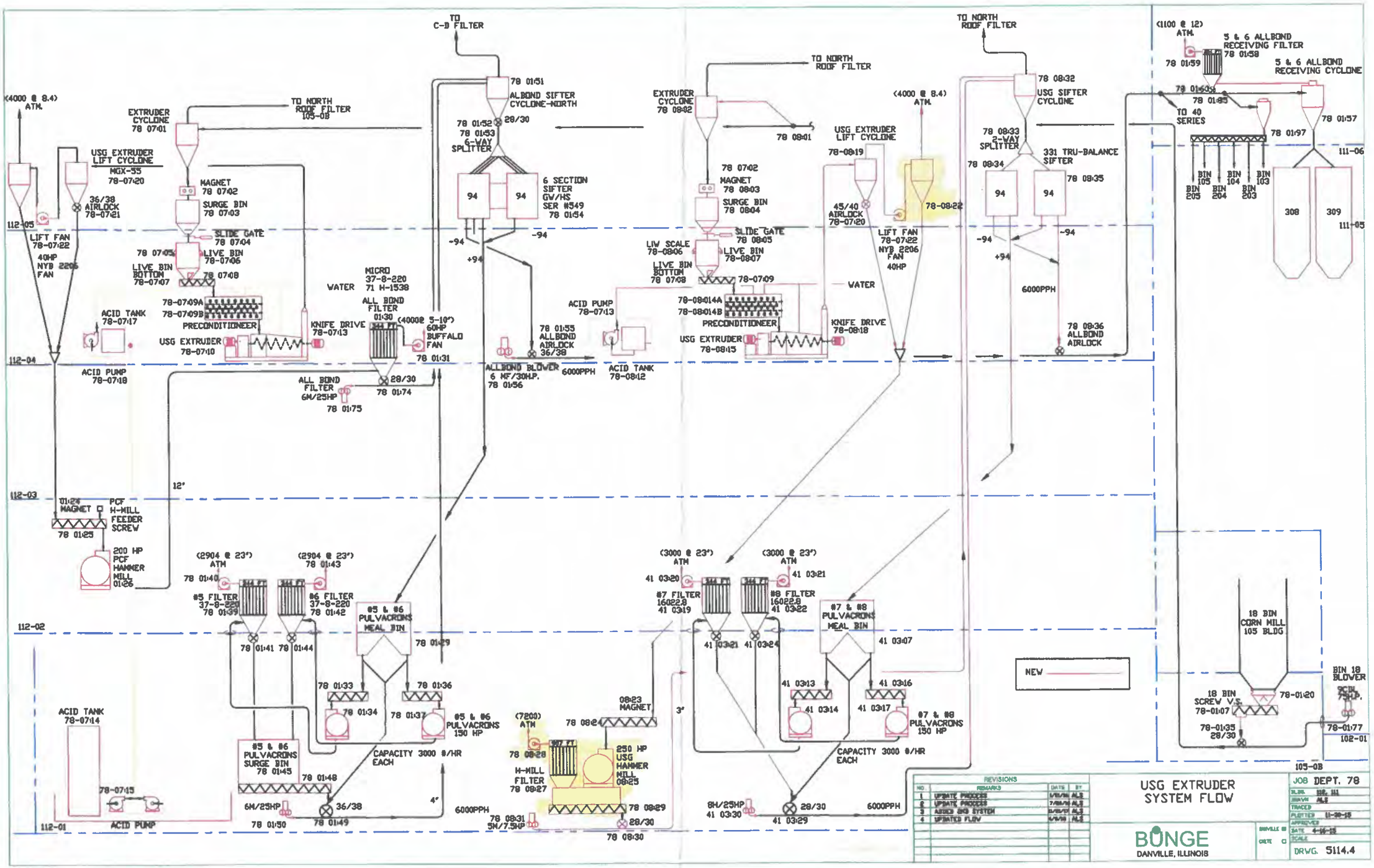
REVISIONS			
NO.	REMARKS	DATE	BY
1	REVISIONS & UPDATE	8/29/91	M.S.
2	DRAWING UPDATE	9/29/93	RWH
3	DRAWING UPDATE	11/29/93	RWH

FLOW DIAGRAM - PCM COOKING & PCM GRINDING SYSTEMS 78-02 & 78-03

BUNGE
DANVILLE, ILLINOIS

DANVILLE ☒
DECATUR ☐

JOB DEPT. 78
PLAN FILE 78S
DRAWN RWH
TRACED
CHECKED 9-19-91
APPROVED
DATE 11-21-91
SCALE NONE
DRWG. 3259.3


TO C-D FILTER
78 01:51
ALLBOND SIFTER CYCLONE-NORTH
78 01:52 28/30
78 01:53 6-WAY SPLITTER
6 SECTION SIFTER GW/HS SER #549 78 01:54
94
94
-94
-94
+94
TO NORTH ROOF FILTER 105-08
EXTRUDER CYCLONE 78 07:01
(4000 @ 8.4) ATM.
USG EXTRUDER LIFT CYCLONE MGX-55 78-07:20
36/38 AIRLOCK 78-07:21
LIFT FAN 78-07:22 40HP NYB 2206 FAN
112-05
MAGNET 78 07:02
SURGE BIN 78 07:03
SLIDE GATE 78 07:04
78 07:05
LIVE BIN 78-07:06
LIVE BIN BOTTOM 78-07:07
78 07:08
78-07:09A
78-07:09B
PRECONDITIONEER
KNIFE DRIVE 78-07:13
USG EXTRUDER 78-07:10
ACID TANK 78-07:17
ACID PUMP 78-07:18
112-04
WATER
MICRO 37-8-220 71 H-1538
ALL BOND FILTER 01:30 (4000@ 5-10") 344 FT
60HP BUFFALO FAN 78 01:31
ALL BOND FILTER 6M/25HP 78 01:75
28/30 78 01:74
ALLBOND BLOWER 6 MF/30HP. 78 01:56
78 01:55 ALLBOND AIRLOCK 36/38
6000PPH
ACID PUMP 78-07:13
ACID TANK 78-08:12
TO NORTH ROOF FILTER
EXTRUDER CYCLONE 78 08:02
78 08:01
USG EXTRUDER LIFT CYCLONE 78-08:19
(4000 @ 8.4) ATM.
78-08:22
45/40 AIRLOCK 78-07:20
LIFT FAN 78-07:22 NYB 2206 FAN 40HP
78 07:02
MAGNET 78 08:03
SURGE BIN 78 08:04
SLIDE GATE 78 08:05
LIV SCALE 78-08:06
LIVE BIN 78-08:07
LIVE BIN BOTTOM 78 07:08
78-07:09
78-08:14A
78-08:14B
PRECONDITIONEER
USG EXTRUDER 78-08:15
KNIFE DRIVE 78-08:18
WATER
TO NORTH ROOF FILTER
78 08:32 USG SIFTER CYCLONE
78 08:33 2-WAY SPLITTER
78 08:34
331 TRU-BALANCE SIFTER
78 08:35
94
94
-94
-94
+94
6000PPH
78 08:36 ALLBOND AIRLOCK
(1100 @ 12) ATM.
5 & 6 ALLBOND RECEIVING FILTER 78 01:58
78 01:59
5 & 6 ALLBOND RECEIVING CYCLONE
78 01:96
78 01:95
78 01:97
78 01:57
TO 40 SERIES
111-06
BIN 205
BIN 204
BIN 203
BIN 105
BIN 104
BIN 103
308
309
111-05
12"
112-03
01:25 MAGNET
PCF H-MILL FEEDER SCREW 78 01:25
200 HP PCF HAMMER MILL 01:26
(2904 @ 23") ATM 78 01:40
(2904 @ 23") 78 01:43
#5 FILTER 37-8-220 78 01:39
#6 FILTER 37-8-220 78 01:42
112-02
78 01:41
78 01:44
#5 & #6 PULVACRONS MEAL BIN
78 01:29
78 01:33
78 01:34
78 01:36
78 01:37
#5 & #6 PULVACRONS 150 HP
#5 & #6 PULVACRONS SURGE BIN 78 01:45
78 01:48
CAPACITY 3000 #/HR EACH
4"
6M/25HP 78 01:50
36/38 78 01:49
6000PPH
ACID TANK 78-07:14
78-07:15
ACID PUMP
112-01
(7200) ATM
78 08:28
H-MILL FILTER 78 08:27
250 HP USG HAMMER MILL 08:25
08:23 MAGNET 78 08:24
78 08:29
28/30
78 08:30
6M/7.5HP 78 08:31
(3000 @ 23") ATM
41 03:20
(3000 @ 23") ATM
41 03:21
#7 FILTER 16022.8 41 03:19
#8 FILTER 16022.8 41 03:22
#7 & #8 PULVACRONS MEAL BIN
41 03:07
41 03:21
41 03:24
41 03:13
41 03:14
41 03:16
41 03:17
#7 & #8 PULVACRONS 150 HP
3"
CAPACITY 3000 #/HR EACH
8M/25HP 41 03:30
28/30 41 03:29
6000PPH
NEW
18 BIN CORN MILL 105 BLDG
18 BIN SCREW VS 78-01:07
78-01:20
78-01:35 28/30
BIN 18 BLOWER 9CIN 75HP.
78-01:77
102-01
105-08
REVISIONS
NO. REMARKS DATE BY
1 UPDATE PROCESS 1/15/14 ALS
2 UPDATE PROCESS 7/28/14 ALS
3 ADDED 2ND SYSTEM 11/25/15 ALS
4 UPDATED FLOW 4/5/16 ALS
USG EXTRUDER SYSTEM FLOW
JOB DEPT. 78
BUNGE
DANVILLE, ILLINOIS
DRWG. 5114.4

Kras, Kim

From: Barria, German
Sent: Thursday, August 2, 2018 11:53 AM
To: James Burris
Cc: Bernoteit, Bob
Subject: RE: [External] Re: Bunge North America Inc.

Jim,

We can move forward to issue the construction permit #18050016 within the original 90-day (8/12/18), but we will required the submittal of a fugitive dust control plan before we move forward with the FESOP #96020027, which that is in the process of developing a draft.
Please provide me any comments you may have on the draft construction permit, so as to complete the review and issuance of that construction permit.

Thank you.

From: James Burris [mailto:James.Burris@bunge.com]
Sent: Thursday, August 02, 2018 7:21 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: [External] Re: Bunge North America Inc.

German,

Thank you for sending a draft copy of the construction permit. I will review it and send you my comments.

Regarding the request for an extension of time necessary to submit and review a fugitive dust plan, I talked to the plant and they are ready to install the equipment and would rather not undergo a 30 day delay. If it is important for the plant to submit a fugitive dust plan I suggest making it a condition of the permit. I can add suggested language to my comments on the draft permit.

Jim Burris, PE
Bunge North America
(314) 292-2937 phone
(314) 292-4937 fax
(314) 308-3904 cell

From: "Barria, German" <German.Barria@Illinois.gov>
To: "james.burris@bunge.com" <james.burris@bunge.com>
Cc: "Bernoteit, Bob" <Bob.Bernoteit@Illinois.gov>
Date: 07/31/2018 09:39 AM
Subject: Bunge North America Inc.

Corrections,
Also please find attached some info about fugitive dust plant, and a template letter for an extension letter.

-----Original Message-----

From: Barria, German
Sent: Tuesday, July 31, 2018 9:24 AM
To: 'james.burris@bunge.com' <james.burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America Inc.

Hi James,

First of, I would like to apologize for the late notification of the need that Bunge N. A. , ID #183020ABY submit a fugitive dust plant. This facility is located in an Environmental Justice area, and IEPA upper-management has adopted this procedure that a fugitive dust plan, be submitted, it need to be reviewed, prior to issuing a construction permit for such sources, either in an E.J area and/or subject the rule (35 Ill. Adm. Code 212.302 - Fugitive particulate matter geographic areas of application.) On that note, I also will be needing an extension of the 90th day review (8/12/18), until 9/12/18, the review of such fugitive dust plant required about 30 days. And lastly, please find attached a draft of the construction permit #18050016, for your review. Please note, that the sooner a fugitive dust plant is received, it can be review and permit can be issued.

Thank you for your understanding.

German Barria
Environmental Protection Engineer
IEPA/Bureau of Air/Permits
Ph: 217-785-0767
Email: German.Barria@illinois.gov

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[attachment "18050016 - Bunge Grain Milling Inc. - Construction Permit - 07-31-2018.docx" deleted by James Burris/STL/BNA/Bunge] [attachment "Fugitive Dust Handbook 2006.pdf" deleted by James Burris/STL/BNA/Bunge] [attachment "FUGITIVEFORM.pdf" deleted by James Burris/STL/BNA/Bunge] [attachment "FUGITIVEPARTICULATE.doc" deleted by James Burris/STL/BNA/Bunge] [attachment "Waiver - Const.docx" deleted by James Burris/STL/BNA/Bunge]

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Kras, Kim

From: James Burris <James.Burris@bunge.com>
Sent: Friday, August 3, 2018 8:33 AM
To: Barria, German
Cc: Bernoteit, Bob
Subject: RE: [External] Re: Bunge North America Inc.

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Jim Burris, PE
Bunge North America
(314) 292-2937 phone
(314) 292-4937 fax
(314) 308-3904 cell

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German Barria
Environmental Protection Engineer
IEPA/Bureau of Air/Permits
Ph: 217-785-0767
Email: German.Barria@illinois.gov

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[attachment "18050016 - Bunge Grain Milling Inc. - Construction Permit - 07-31-2018.docx" deleted by James Burris/STL/BNA/Bunge] [attachment "Fugitive Dust Handbook 2006.pdf" deleted by James Burris/STL/BNA/Bunge] [attachment "FUGITIVEFORM.pdf" deleted by James Burris/STL/BNA/Bunge] [attachment "FUGITIVEPARTICULATE.doc" deleted by James Burris/STL/BNA/Bunge] [attachment "Waiver - Const.docx" deleted by James Burris/STL/BNA/Bunge]

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR ALEC MESSINA, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

Bunge North America, Inc.
Attn: Kenny Head
321 East North Street
Danville, Illinois 61832

Application No.: 18050016 I.D. No.: 183020ABT
Applicant's Designation: Date Received: May 14, 2018
Subject: Extrusion System Upgrade
Date Issued: August 8, 2018
Location: 321 East North Street, Danville, Vermilion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of one (1) USG Extrusion Line comprised of one (1) USG Hammermill and Filter System and one (1) USG Extruder Pellet Transfer Collection Cyclone and the replacement of two (2) existing PCM Hammermills and associated #2, #3, #4, and #5 Filters with one (1) PCM Hammermill and Filter System as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the construction of the USG Hammermill and Filter System, USG Extruder Pellet Transfer Collection Cyclone, and PCM Hammermill and Filter System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM) and Particulate Matter less than 10 microns (PM_{10}) from the above-listed equipment below the levels that would trigger the applicability of these rules.

b. Operation of the equipment listed above is allowed under this permit until final action is taken on the Federally Enforceable State Operating Permit (FESOP) application for this source.

2a. The USG Hammermill and Filter System, USG Extruder Pellet Transfer Collection Cyclone, and PCM Hammermill and Filter System are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a

period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The USG Hammermill and Filter System, USG Extruder Pellet Transfer Collection Cyclone, and PCM Hammermill and Filter System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction of Modification Commenced On or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

3. This permit is issued based on the USG Hammermill and Filter System, USG Extruder Pellet Transfer Collection Cyclone, and PCM Hammermill and Filter System at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because these emission units do not use a material containing chromium or a material containing manganese and are not primarily engaged in manufacturing of animal feed.

4. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station

of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

5. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods

6a. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

b. The filter systems shall be in operation at all times when the associated USG Hammermill and PCM Hammermill are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the filter systems associated with the USG Hammermill and PCM Hammermill such that the filters are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

7a. Emissions from and operation of the emission units of the flour handling system shall not exceed the following limits:

Item of Equipment	(scfm)	(gr/dscf)	PM/PM_{10} Emissions (b/Hr)	(Tons/Yr)
PCM Hammermill	7,200	0.002	0.12	0.54
USG Hammermill	7,200	0.002	0.12	0.54
USG Extruder Transfer Collection Cyclone	4,000	0.02	0.69	3.00
		Total:	0.77	3.44

These limits are based on the maximum exhaust air flow rate, maximum grain loading, and 8,760 hours/year of operation.

b. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

8a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures

adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Condition 9 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

9. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

10. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

11a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the filter systems associated with the USG Hammermill and PCM Hammermill:

A. Records for periodic inspection of the filters with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The hours of operation for the USG Hammermill, USG Extruder Pellet Transfer Collection Cyclone, and the PCM Hammermill; and

iii. Monthly and annual PM and PM_{10} emissions from the USG Hammermill, USG Extruder Pellet Transfer Collection Cyclone, and the PCM Hammermill Filter, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 11(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspections and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

12. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

13a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:jlp

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

   a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

   b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

   c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

   d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Kras, Kim

From: Bernoteit, Bob
Sent: Tuesday, June 1, 2021 11:23 AM
To: Barria, German
Subject: Bunge North America, Inc. (183020ABT, 96020027)
Attachments: 96020027 - Bunge North America, Inc..docx; 96020027 - Bunge North America, Inc. (Project Summary).docx

German,

Please see the attached for this draft FESOP and project summary. Thank you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

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Illinois Environmental Protection Agency
Bureau of Air, Permit Section
1021 N. Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

Project Summary
Proposed Federally Enforceable State Operating Permit (FESOP)
Bunge North America, Inc.
Danville, Vermilion County, Illinois

Site Identification No.: 183020ABT
Application No.: 96020027

Schedule
Public Comment Period Begins:
Public Comment Period Closes:

Illinois EPA Contacts
Permit Analyst: German Barria
Community Relations Coordinator: Brad Frost
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I. INTRODUCTION

Bunge North America, Inc. has applied for a Federally Enforceable State Operating Permit (FESOP) for its plant located at 321 E. North Street in Danville. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the renewed permit that it would propose to issue for the plant. However, before renewing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

II. SOURCE DESCRIPTION

Bunge North America, Inc. is a corn mill and grain elevator. The emission units at this plant that require an operating permit are shown in Table 1, below.

Table 1. Listing of Non-Exempt Emission Units Located at the Source.

Emission Unit and Description	Construction Date (and Date Last Modified)
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):	
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10	Prior to 1978
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96	Prior to 1970
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12	Prior to 1978
RHOMBO Truck Dump Pit #3 (5012-0003-0013) controlled by Baghouse Filters APM SJL156-6	1973
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12	Prior to 1978
RHOMBO West General Aspiration (5012-0009-0009) controlled by Baghouse Filters APM SJL72-6	1973
RHOMBO Gallery Aspiration (5012-0003-0018) controlled by Baghouse Filters APM SJL72-6	1973
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96	Prior to 1970
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30	Prior to 1978
Conveying General Aspiration (4750-0029-0015) controlled by Baghouse Filters MICROPUL 100S-6-20	Prior to 1978
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):	
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12	1985
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12	1996
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12	1996
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12	Prior to 1978

Emission Unit and Description	Construction Date (and Date Last Modified)
Dry Corn Milling, Processing and Products Handling:	
Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8	1996
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8	1996
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8	1996
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8	1996
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8	1996
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10	1996
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8	1996
South APM Binning (4880-0034-0035) controlled by Baghouse Filters APM 41144.12	1996
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60	1996
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72	1996
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96	1996
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12	1996
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A	1996
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30	1996
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200	1996
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250	1996
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12	1996
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12	1996
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12	1996
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12	1996
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12	1996
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12	1996
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12	1996
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12	1996
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D	1996
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4	1996
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4	Prior to 1970
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B	1996
AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B	1996
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100	1996
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100	1996
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100	1996
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4	1996
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4	1996
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220	1996
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220	1996
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8	1996
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4	1996
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4	1996
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4	1996
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8	1996
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7	1996
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6	1996
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100	1996
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B	1996
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1	1996
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4	1996
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B	1996
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10	1996
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8	1996
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8	1996
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8	1996
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8	1996
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B	1996
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220	1996
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220	1996
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6	1996
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30	1996
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30	1996
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30	1996
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20	1996
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6	1996
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220	1996
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1	1996
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220	1996
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120	1996
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4	1996
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4	1996
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10	1996
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B	1996
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B	1996
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4	1996
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4	1996
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30	1996
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6	1996
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6	1996
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10	1996
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220	1996
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B	1996
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30	1996
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8	1996
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8	1996
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96	1996
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12	1996
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10	1996
Round Bin General Aspiration (4750-0029-0027) controlled by Baghouse Filters APM 14072.6	Prior to 1970
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12	Prior to 1970
North and South Hominy Feed (4860-0018-0007 and 4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2	4860-0018-0007: 1982 4860-0018-0003: Prior to 1970
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8	Prior to 1970
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone	Prior to 1970
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7	1982
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8	Prior to 1970
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8	Prior to 1970
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56	Prior to 1970
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56	Prior to 1970
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE	Prior to 1970
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL	1995
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30	Prior to 1970
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter)	2015
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260)	2016
PCM Hammermill controlled by Filter System (78-03:11)	2018
USG Hammermill controlled by Filter System (78-03:27)	2018
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22)	2018
Corn Mill Products Storage:	
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96	Prior to 1970
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96	Prior to 1970
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12	Prior to 1970

Emission Unit and Description	Construction Date (and Date Last Modified)
Corn Mill Products Milling and Handling:	
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8	Prior to 1970
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4	Prior to 1970
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8	1980
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12	1981
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8	1985
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416	1985
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39	1997
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20	Prior to 1970
LTMS Truck/Rail Dump Pit (4750-0033-0000A)	1985
LTMS Truck Loadout (4750-0033-0000B)	1985
Boiler House/Grounds:	
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1)	1986
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler)	2010
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100)	Prior to 2006

These units are sources of emissions because Particulate Matter (PM) and Particulate Matter less than 10 microns (PM_{10}) is generated from the receiving, handling, and milling of grain at the facility. This source is also a source of Carbon Monoxide (CO) and Nitrogen Oxides (NO_x) from the combustion of fuel in the boilers and generator at this facility. NO_x is formed thermally by the combination of oxygen and nitrogen in the air at the temperatures at which fuel is burned. Thermal NO_x is formed during all common high temperature combustion processes. CO is formed from incomplete combustion of the fuel.

The following table lists annual emissions (tons) of pollutants emitted from this source, as reported in the last three Annual Emission Reports (AER) sent to the Illinois EPA:

Table 2. Actual and Potential (as limited by permit) Emissions of the Source.

Pollutant	Actual Emissions			PTE
	2018 (tons)	2019 (tons)	2020 (tons)	as limited by permit (tons/year)
Carbon Monoxide (CO)	16.5000	16.3400	17.3000	49.40
Nitrogen Oxides (NO_x)	11.9000	11.6000	11.9000	52.06
Particulate Matter (PM)	67.8000	65.8000	65.5000	66.66

Pollutant	Actual Emissions 2018 (tons)	Actual Emissions 2019 (tons)	Actual Emissions 2020 (tons)	PTE as limited by permit (tons/year)
Particulate Matter less than 10 Microns (PM_{10})	27.8000	28.0000	32.9000	65.49
Sulfur Dioxide (SO_2)	0.1100	0.1100	0.1300	0.51
Volatile Organic Material (VOM)	1.1900	1.1700	1.5800	3.16

This source also contains emission units and activities that are exempt from permitting under 35 Ill. Adm. Code 201.146 and the emissions from such units are not limited by the conditions of the draft permit. These emission units include:

150,000 gallon fuel oil storage tank

Based on a review of the estimated potential emissions from the exempt emission units as included in the permit application, the Illinois EPA has determined that the emissions from such exempt emission units are trivial and will not contribute to this source being a major source of emissions for any regulated pollutants emitted from any such exempt emission unit. This is because the emission limits for CO, NO_x, and PM_{10} in the draft FESOP are 90% or less of the applicable major source thresholds, and the combined PTE of the exempt emission units are less than 5% of the applicable major source thresholds, In other words, the emission limits for CO, NO_x, and PM_{10} have been limited to 90% or less of the applicable threshold (or 100 tons/year) by the draft FESOP and the combined potential to emit of the CO, NO_x, and PM_{10} from the exempt units is estimated to be less than 5% of 100 tons/year. In addition, as shown in Table 2, above, the margin of compliance between the actual emissions reported by the source during the last three years and the potential emissions as limited in the draft FESOP is more than 66% for CO, 77% for NO_x, and 54% for PM_{10}, which further minimizes the likelihood of the source exceeding its permit limits or the applicable major source thresholds.

In cases where the potential emissions of exempt emission units may contribute to the source exceeding major source thresholds (for example, if the emission limits in the FESOP are 90% or more of the applicable major source thresholds and the exempt units' PTE is 5% or more of the threshold) the Illinois EPA has established limits on such emission units in the draft FESOP that would normally be exempt from permitting. The permitting exemptions in 35 Ill. Adm. Code 201.146 do not relieve the owner or operator of any source from any obligation to comply with any other applicable requirements.

III. GENERAL DISCUSSION

FESOPs are federally enforceable, that is, the terms and conditions of the permits can be enforced by the United States Environmental Protection Agency (USEPA) under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source may operate this plant under a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need to

obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for CO, NO_x, and PM_{10}. The potential emissions of other pollutants (e.g., SO_2, VOM, and Hazardous Air Pollutants) from the plant are small enough that no restrictions are needed to avoid being a major source of these pollutants.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board (Board). These emission standards represent the basic requirements for sources in Illinois. The Board has specific standards for particulate matter under 35 Ill. Adm. Code Part 212. The processing and milling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions), which limits the opacity of emissions to 30 percent, and 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units), which limits PM emissions based on each units process weight rate. The receipt and handling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions) and 35 Ill. Adm. Code Part 212 Subpart S (Agriculture), which requires the source to implement and use certain housekeeping practices to reduce particulate matter emissions and to equip the sources receiving dump pits with air pollution control equipment that is capable of at least 90% collection efficiency for PM emissions. The boilers are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions) and 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units), which limits the emissions of PM from the combustion of liquid fuel to 0.10 lb/mmBtu.

The Clayton Boiler is at this source are subject to the New Source Performance Standards (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. The source also has another boiler that was constructed prior to June 9, 1989 and as result will not be subject the NSPS standards.

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) at this source are subject to the New Source Performance Standards (NSPS) for Grain Elevators, 40 CFR 60, Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. The source also has other grain receiving, cleaning and storage operations that were constructed prior to August 3, 1978 and as result will not be subject the NSPS standards.

Emergency Generator Set DG-100 at this source are subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR 63, Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

The application shows that the plant is in compliance with applicable state and federal emission standards.

V. CONTENTS OF THE PERMIT

The permit that the Illinois EPA is proposing to issue will identify the specific emission standards that apply to the emission units at the plant. As explained, the processing

and milling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B, which limits the opacity of emissions to 30 percent, and 35 Ill. Adm. Code Part 212 Subpart L, which limits PM emissions based on each units process weight rate. The receipt and handling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B and 35 Ill. Adm. Code Part 212 Subpart S, which requires the source to implement and use certain housekeeping practices to reduce particulate matter emissions and to equip the sources receiving dump pits with air pollution control equipment that is capable of at least 90% collection efficiency for PM emissions. The boilers are subject to 35 Ill. Adm. Code Part 212 Subpart B and 35 Ill. Adm. Code Part 212 Subpart E, which limits the emissions of PM from the combustion of liquid fuel to 0.10 lb/mmBtu. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for CO, NO_x, and PM_{10}. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit would also set limitations on PM_{10} emissions based on the air flow to the baghouses and cyclones and the grain loading of these control devices determine by stack testing conducted at the source. The boilers are to be limited based on the types of fuel combusted and the amount of each fuel usage. These limitations are consistent with the historical operation of emission units at the plant.

The permit conditions would also continue to require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for issuance of its permit. The Illinois EPA is therefore proposing to issue the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
RHOMBO Truck Dump Pit #3 (5012-0003-0013) controlled by Baghouse Filters APM SJL156-6;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12;
RHOMBO West General Aspiration (5012-0009-0009) controlled by Baghouse Filters APM SJL72-6;
RHOMBO Gallery Aspiration (5012-0003-0018) controlled by Baghouse Filters APM SJL72-6;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;
Conveying General Aspiration (4750-0029-0015) controlled by Baghouse Filters MICROPUL 100S-6-20;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
South APM Binning (4880-0034-0035) controlled by Baghouse Filters APM 41144.12;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;

AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;
AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;

Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;

#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Round Bin General Aspiration (4750-0029-0027) controlled by Baghouse Filters APM 14072.6;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
North and South Hominy Feed (4860-0018-0007 and 4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed,

no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent,

into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0

	Metric	English
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code

212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve

the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code

214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing

on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company

associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less

than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

1. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

   i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

   ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

   iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 80.510(b), beginning June 1, 2010. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all nonroad (NR) and locomotive (LM) diesel fuel is subject to the following per-gallon standards:

   i. Sulfur content 15 ppm maximum for NR diesel fuel.

   ii. Cetane index or aromatic content, as follows:

A. A minimum cetane index of 40; or

B. A maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16á. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. The Fugitive Particulate Operating Program, as submitted by the Permittee on DATE PROGRAM APPROVED BY FOS WAS RECEIVED is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program

within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
RHOMBO Truck Dump Pit #3	0.0017	14,500	0.21	0.90
Railcar Dump Pit	0.0017	27,000	0.39	1.70
RHOMBO West General Aspiration	0.0017	6,800	0.09	0.40
RHOMBO Gallery Aspiration	0.0017	9,200	0.14	0.60
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Conveying General Aspiration	0.00085	7,600	0.05	0.24
Grain Receiving Fugitives				5.40
			Total:	14.02

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
South APM Binning	0.0006	30,000	0.15	0.68
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Round Bin General Aspiration	0.0006	7,134	0.04	0.16
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
North Hominy Feed	0.0006	14,000	0.07	0.32
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Bin 945 Germ Receiver	0.0006	1,800	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
			Total:	29.00

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Throughput (T/Mo)	(T/Yr)	E M I S S I O N S (lb/T)	PM (T/Mo)	(T/Yr)	(lb/T)	PM_{10} (T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original

test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control

equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Condition 22 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40

CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

24. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

25a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

26a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a

contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

27. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

28a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance

Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

29. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

30a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

31a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

   A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

   B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 31(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

32. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

33a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major

source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

   i. An existing stationary CI RICE located at an area source of HAP emissions.

   ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

   i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is

specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during

the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

34. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

35a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

36a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			14.02	14.02		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			29.00	29.00		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.66	65.49	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Barria, German

From: Barria, German
Sent: Tuesday, June 1, 2021 1:58 PM
To: James Burris
Cc: Bernoteit, Bob
Subject: Bunge North America, Inc., - ID #183020ABT
Attachments: 96020027 - Bunge North America Inc - FESOP - 06-01-2021.docx; Fugitive Dust Handbook 2006.pdf; FUGITIVEFORM.pdf; FUGITIVEPARTICULATE.doc; Inspection Manual For PM 10 Emissions From Paved Unpaved Roads And Storage Piles.pdf

Hello Mr. Burris,
I'm contacting you in regard to the Permit application for federally enforceable state operating permit (FESOP) For Bunge North America, Inc., located at 321 E. North Street, Danville, Vermilion County, ID #183020ABT, permit application #96020027, a draft of the permit has been developed, see attached file. Further, to continue with de review of these permit , we need the following

1. A fugitive dust plant for the source.
2. Bunge to review the draft permit and provide us with their comments.

Attached are also documents that will help with the development of a source Fugitive Particulate Operating Program (FPOP).

Don't hesitate to contact me if you have any questions.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

BUNGE MILLING, INC.
Facility ID 183020ABT

April-11

EMISSIONS PTE REPORT
WORKSHEET

YEAR- MAX

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
PEUG1 Corn & Soybean Receiving, Cleaning and Storage								
			Base emissions on 1999 PM test on 5012-0005-0021 filter exhaust.	**0.0017**	**gr/acf**			
			Base emissions on 2000 PM10 test on 4880-0034-0069 filter exhaust.	**0.00085**	**gr/acf**			
			Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.	**0.00060**	**gr/acf**			
Pre NSPS								
5012-0001-0016	301-02	1	TRUCK DUMP #1	8760	APM 40072.10	18,500	1.2	
5012-0010-0054	301-05	9	HOFFMAN BLDG 301 VAC	8760	HOFFMAN 48X96	1,000	0.1	
5012-0005-0029	301-01	10	WEST HDHS TRANS GEN ASP	8760	DD 484RF12	55,000	3.4	
5012-0003-0013	311-03	11	RHOMBO TRUCK DUMP #3	8760	APM SJL156-6	14,500	0.9	
5012-0004-0016	304-02	132	RAIL DUMP	8760	APM 41120.12	27,000	1.7	
5012-0009-0009	311-01	230	RHOMBO WEST GEN ASP	8760	APM SJL72-6	6,800	0.4	
5012-0003-0018	311-02	231	RHOMBO GALLERY GEN ASP	8760	APM SJL72-6	9,200	0.6	
5012-0010-0047			TRACK 6 VACUUM	8760	HOFFMAN	700	0.04	
4870-0013-0015	110-08	23	CLEANINGS DISCHARGE	8760	BUHLER 16S-6-30	1,900	0.04	
4750-0029-0015	201-08	99	CONVEYING GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.24	
5012-0000-0000			GRAIN RECEIVING FUGITIVES	8760	-	-	5.4	
NSPS								
5012-0005-0021	301-04	8	TRUCK DUMP #4 & W GAL GEN ASP	8760	DD 484RF12	36,017	2.3	
4870-0013-0001	110-09	24	CLEANING NORTH APM	8760	APM 41216.12	41,000	1.3	
4880-0034-0069	115-02		CORN CLEANING	8760	TD 484RF12	57,372	1.8	
5012-0002-0012	310-01	6	NORTH ST GRAIN/MEAL TRUCK DUMP #2	8760	DD 484RF12	20,000	1.3	
					Subtotal	276,589	19.4	
PEUG2 Dry Corn Milling, Processing and Products Handling								
			Base emissions on 2000 PM10 test on 4880-0034-0010 filter exhaust.	**0.00060**	**gr/acf**			
			Base emissions on 2000 PM10 test on 4880-0034-0077 filter exhaust.	**0.00060**	**gr/acf**			
4870-0010-0055	110-04	19	BEMIS BAGGING	8760	APM 16019.8	1,660	0.04	
4870-0010-0030	110-05	20	BAGGING GEN ASP	8760	APM 40020.8	3,400	0.08	
4870-0013-0019	110-07	22	BAGGING PACKER GEN ASP	8760	APM 14042.8	4,400	0.1	
4880-0042-0057	109-04	213	BRAN DRYER PROCESS	8760	APM 14036.8	2,800	0.06	
4880-0042-0062	109-03	214	BRAN SIFTER PROCESS	8760	APM 10144.8	8,230	0.18	
4880-0034-0054	109-02	215	EAST MEAL DRY/COOL	8760	APM 40120.10	13,000	0.3	
4880-0034-0059	109-01	216	WEST MEAL DRY	8760	APM 40144.8	13,295	0.3	
4880-0034-0035	105-06	217	S APM BINNING	8760	APM 41144.12	30,000	0.7	
4880-0034-0027	105-05	218	8TH FR DRACCO SCREENING	8760	DRACO 6MB-60	42,000	0.9	
4880-0034-0001	105-04	219	9TH FR DRACCO SCREENING	8760	DRACO 8MB-72	69,500	1.6	
4880-0032-0052	105-03	220	BLDG 105 VACUUM	8760	HOFFMAN	1,500	0.03	
4870-0021-0001	104-02	221	BULK LOADING WHITE GOODS	8760	DD 484RF12	36,000	0.8	
4870-0015-0016	104-01	222	BLDG 104 VACUUM	8760	HOFFMAN 38405A	1,500	0.03	
4880-0042-0054	103-06	223	BRAN BIN	8760	BUHLER 16S-6-30	1,960	0.04	
4880-0008-0028	103-05	224	6TH FLR SCREENING	8760	WIEDENMANN 2X4 LF150-1200	10,000	0.2	
4880-0008-0040	103-04	225	W 4TH FLR GRAVITY TABLES	8760	WIEDENMANN 2X5 LF225-2250	10,000	0.2	
4880-0034-0010	101-05	226	S LUNCHROOM SCREENING	8760	CD 484RF12	42,000	0.9	
4880-0034-0042	101-04	227	S CD SCREENING	8760	CD 484RF12	37,500	0.8	
4880-0034-0048	101-02	228	N CD GEN ASPIRATION	8760	CD 484RF12	30,000	0.7	
4880-0034-0019	101-01	229	N LUNCHROOM SCREENING	8760	CD 484RF12	36,000	0.8	
4870-0013-0024	115-01		PACKAGE & BULK LOADING	8760	TD 484RF12	42,000	0.9	
4880-0034-0077	115-03		CAMAS/BRAN	8760	TD 484RF12	45,021	1.0	
4880-0034-0071	115-04		THRU & TAIL STOCK DRYERS	8760	TD 484RF12	56,000	1.25	
4880-0032-0070	115-05		BLDG 115 VACUUM	8760	HOFFMAN	825	0.02	
4880-0044-0070	10-44,70		GRAVITY TABLE #3	8760	TORIT CPC-12	6,200	0.14	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4880-0044-0073	10-44:73		GRAVITY TABLE #4	8760	TORIT CPC-12	6,200	0.14	
4880-0044-0076	10-44:76		GRAVITY TABLE #5	8760	TORIT CPC-12	6,200	0.14	
4870-0005-0003			TRACK 2 UNLOAD SEC REC	8760	USS INC.	440	0.014	
4880-0009-0005			GERM GEN ASP	8760	APM 16030.4			
4932-0001-0001	348-01	87	LAB FILTER	8760	APM 14106.4	900	0.1	
4900-0003-0039	112-12A	70	AB FIN PROD SURGE NORTH	8760	MICROPUL 8B	742	0.02	
4900-0003-0045	112-12B	70	AB FIN PROD SURGE SOUTH	8760	MICROPUL 8B	742	0.02	
4990-0005-0012	112-13A	71	1/2 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0005-0042	112-13B	71	1/2 PULVOCRON VISC FLOUR REC	8760	BUHLER 9-6-100	380	0.01	
4990-0002-0010	112-13C	71	3/4 PULVOCRON MEAL REC	8760	BUHLER 9-6-100	380	0.01	
4990-0004-0013	112-14A	72	9/10 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0003-0010	112-14B	72	7/8 PULVOCRON MEAL SEC REC	8760	BUHLER 16009.4	3,000	0.07	
4990-0002-0019	112-15A	73	#3 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0002-0022	112-15B	73	#4 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0001-0039	112-15B	73	#5 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0021	112-15C	73	#1 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0005-0024	112-15D	73	#2 PULVOCRON	8760	BUHLER 37-8-220	2,904	0.06	
4990-0003-0019	112-18A	75	#7 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0003-0022	112-18B	75	#8 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0022	112-18C	75	#9 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0004-0025	112-18D	75	#10 PULVOCRON	8760	APM 16022.8	3,000	0.07	
4990-0002-0008	112-19A	76	3/4 PULVN GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0005-0010	112-19B	76	1/2 PULV GRINDER SURGE	8760	MICROPUL 2 1/2B	500	0.01	
4990-0004-0011	112-20A	77	9/10 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0003-0008	112-20B	77	7/8 PULV GRINDER SURGE	8760	APM 16104.4	570	0.01	
4990-0005-0028	112-21A	78	1/2 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0002-0026	112-21B	78	3/4 FLOUR SURGE BIN	8760	MICROPUL 2 1/2B	500	0.01	
4990-0003-0026	112-22A	79	7/8 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0004-0029	112-22B	79	9/10 FLOUR SURGE BIN	8760	APM 16104.4	570	0.01	
4990-0006-0024	112-27	83	HIBOND VISC FLAKE ROLLER MILL	8760	APM 15066.8	7,200	0.16	
4820-0001-0029	103-01		CSM BLENDED FOOD REC	8760	APM 40070.7	4,077	0.09	
4820-0001-0052	103-02		BLENDED FOOD PACK	8760	APM 16150.6	10,000	0.22	
4900-0001-0068	111-01		ALLBOND VISC FLOUR GEN ASP	8760	BUHLER 16-8-100	867	0.02	
4820-0003-0007	111-03		MILK BINS	8760	MICROPUL 6B	400	0.01	
4990-0007-0049	111-04		300 SERIES BINNING	8760	MICROPUL 1F1	4,452	0.10	
4990-0001-0002	111-07		SOY MEAL GEN ASP	8760	APM 16022.4	1,435	0.03	
4990-0001-0006	111-08		SOY MEAL SURGE	8760	MICROPUL 6B	500	0.01	
4990-0001-0025	111-10		MEAL BIN COOLER	8760	APM 400072.10	9,158	0.20	
4990-0002-0043	111-12		3/4 SOY FLOUR REC	8760	APM16014.8	700	0.02	
4820-0003-0072	111-13		TRI CAL BINS	8760	APM 16009.8	780	0.02	
4900-0001-0058	111-14A		5/6 ALLOND REC	8760	APM 16014.8	1,100	0.02	
4990-0003-0032	111-14B		7/8 SOY FLOUR REC	8760	APM 16014.8	1,100	0.02	
4990-0002-0033	111-15A		BIN 308	8760	MICROPUL 6B	500	0.01	
4820-0002-0072	111-15B		BIN 509	8760	MICROPUL 6B	500	0.01	
4820-0002-0068	111-15C		BIN 508	8760	MICROPUL 6B	500	0.01	
4820-0003-0038	111-15D		BIN 310	8760	MICROPUL 6B	500	0.01	
4990-0002-0036	111-15E		BIN 309	8760	MICROPUL 6B	500	0.01	
4990-0004-0037	111-17		9/10 PULVICRON REC	8760	BUHLER 16-6-220	700	0.02	
4820-0002-0038	111-18		MILK BINS	8760	MICROPUL 21-6-220	807	0.02	
4820-0002-0035	111-19		MILK BIN BAG DUMP	8760	APM 14048.6	6,000	0.13	
4990-0007-0029	111-21		BLENDING BATCH BIN GEN ASP	8760	BUHLER 25S-6-30	1,250	0.03	
4990-0007-0036	111-22		BLENDER GEN ASP	8760	BUHLER 16S-6-30	1,055	0.02	
4990-0007-0032	111-23		BLENDING GEN ASP	8760	MICROPUL 36S-8-30	1,645	0.04	
4820-0003-0063	111-24		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	3,200	0.07	
4820-0003-0059	111-25		CSB BINNING GEN ASP	8760	BUHLER 64S-6-20	2,739	0.06	
4990-0006-0040	111-27		GEN ASPIRATION	8760	BUHLER 9-8-220	742	0.02	
4900-0001-0091	111-28		#5 SL GEN ASP & #5 EXPANDER	8760	APM 14024.6	3,000	0.07	
4990-0011-0001	111-29		FIBER REC GEN ASP	8760	BUHLER 9-8-220	648	0.01	
4820-0002-0011	111-30		PCM BINNING	8760	MICROPUL 1F1	2,241	0.05	
4870-0010-0005	111-34		CF BRAN PACKING BINNING	8760	MICROPUL 25-8-220	1,232	0.03	
4900-0005-0035	111-36		BLDG 111 VACUUM	8760	HOFFMAN 60X120	1,500	0.03	
4870-0006-0006	111-37		110/210 REC GEN ASP	8760	APM 16030.4	1,400	0.03	
4990-0011-0029	111-38		FIBER REC GEN ASP	8760	APM 16019.4	1,000	0.02	
4990-0001-0029	111-41		COOLING TOWER	8760	APM 40072.10	14,000	0.31	
4820-0003-0022	111-42		INGREDIENT BIN 601	8760	MICROPUL 4B	210	0.00	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
4820-0003-0026	111-43		INGREDIENT BIN 602	8760	MICROPUL 4B	210	0.00	
4820-0003-0030	111-44		INGREDIENT BIN 603	8760	MICROPUL 2 1/2 B	210	0.00	
4820-0003-0034	111-45		INGREDIENT BIN 604	8760	APM 15105.4	210	0.00	
4820-0003-0018	111-46		MICRO INGR DUMP FILTER	8760	APM 15105.4	2,500	0.06	
4820-0003-0004	111-47		MIXER GEN ASP	8760	BUHLER 25S-6-30	1,500	0.03	
4900-0001-0065	112-03		3/4 HAMMERMILL	8760	APM 16009.6	1,258	0.03	
4900-0001-0006	112-04		#3 & #4 EXPANDERS	8760	APM 16009.6	1,017	0.02	
4900-0005-0001	112-05		REPROCESS GEN CD ROOF	8760	CD 376RF10	27,550	0.62	
4900-0001-0042	112-08		#6 PULV GRINDER	8760	BUHLER 37-8-220	2,904	0.06	
4900-0001-0046	112-09		5/6 PULV AB FIN PROD SURGE BIN	8760	MICROPUL 4B	570	0.01	
4900-0002-0032	112-10		PELLET BINS	8760	BUHLER 16S-6-30	705	0.02	
4900-0003-0017	112-11A		#1 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0020	112-11B		#2 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0023	112-11C		#3 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0026	112-11D		#4 PCM MIGRIND	8760	APM 16022.8	2,143	0.05	
4900-0003-0029	112-11E		#5 PCM GRIND	8760	APM 16022.8	2,143	0.05	
4990-0006-0027	112-11F		VISCOSITY FLOUR REC	8760	APM 16022.8	2,143	0.05	
4990-0011-0010	112-17		COND RECEIVER/SOY MEAL GRIND	8760	APM 16014.8	1,350	0.03	
4900-0005-0007	112-24		GRIND REJECT/SCRAP BIN	8760	MICROPUL 2 1/2B	500	0.01	
4900-0005-0029	112-29		BLDG 112 VACUUM	8760	HOFFMAN	500	0.01	
4900-0001-0030	112-30		AB GRIND SURGE BIN	8760	BUHLER 37-8-220	2,100	0.05	
4900-0005-0006	112-31		N DAY GEN ASP & #5 EXPANDER	8760	CD 484RF12	36,000	0.81	
4820-0001-0093			BLENDED FOODS FILTER	8760	DD 124RF10	5,080	0.11	
4750-0029-0027	202-01	109	ROUND BIN GEN ASP	8760	APM 14072.6	7,134	0.16	
4912-0002-0054	209-01	116	HOMINY TRUCK LDOUT ASP	8760	DD 484RF12	37,000	0.83	
4860-0018-0007	208-05	119	N HOMINY FEED	8760	MICROPUL	14,000	0.31	
4860-0018-0003	208-06	123	S HOMINY FEED	8760	MICROPUL	15,000	0.34	
4860-0022-0017	208-15	133	SEC CLEAN GRINDING	8760	APM	2,000	0.04	
4860-0024-0003	208-12	177	BRAN DRYER	8760	CORONA CYCLONE	6,888	1.42	
4912-0006-0017	203-02	180	TRACK 16 BULK RAIL LDOUT	8760	WEIDENMAN LFT 2X7	30,000	0.67	
4860-0017-0073	202-07	181	FLAKING GEN ASP	8760	AERODYNE 7500 SVC	16,000	0.36	
4860-0023-0001	201-02	182	GERM DUSTERS ASP	8760	APM 40120.8	7,400	0.17	
4860-0017-0003	201-12		GERM DRYER	8760	CYCLONE	10,000	2.06	
4860-0017-0072			GERM ROLLS ASPIRATION	8760	CYCLONE	5,000	1.03	
4860-0019-0003	208-11	124	FTS DRYER ASPIRATION	8760	CORONA 15 CYCLONE	6,888	1.42	
4860-0024-0037	208-04	117	PET BRAN KICE LITES ASP	8760	MICROPUL	1,600	0.04	
4860-0017-0026			BIN 945 GERM RECEIVER	8760	BUHLER 36S-6-30	1,800	0.04	
					Subtotal	943,325	26.5	
~~PEUG3 CORN OIL EXTRACTION~~								
	~~Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.~~			~~0.0055~~	~~gr/acf~~			
~~4861-0006-0005~~	~~204-02~~	~~179~~	~~CORN EXTRACTOR, DISTILLATION, DT~~	~~8760~~	~~MIN OIL ABSORBER~~	~~0~~	~~MACT hex loss~~	~~0~~
~~4861-0003-0018~~	~~205-01~~	~~141~~	~~CORN MEAL DC PLANT #2~~	~~8760~~	~~MAC CYCLONE~~	~~0~~	~~0.00~~	
					~~Subtotal~~	~~0~~	~~0.00~~	~~0~~
PEUG4 ~~SOYBEAN PREPERATION~~ CORN MILL PRODUCT STORAGE								
	~~Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.~~			~~0.0055~~	~~gr/acf~~			
	General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.			**0.00060**	**gr/acf**			
~~4750-0038-0003~~	~~215-01~~	~~134~~	~~E-W DRYER~~	~~8760~~	~~DUCON CYCLONE~~	0	0.00	
~~4750-0036-0001~~	~~215-02~~	~~175~~	~~E-W BEAN CLEANING ASP/DEHULL~~	~~8760~~	~~484RF12~~	0	0.00	
~~4750-0029-0042~~	~~201-03~~	~~94~~	~~6TH FLOOR DEHULL~~	~~8760~~	~~MICROPUL 100S 6-20~~	0	0.00	
~~4750-0017-0043~~	~~208-17~~	~~95~~	~~BEAN CONDITIONER~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC
~~4750-0018-0043~~	~~208-18~~	~~98~~	~~FLAKER ASP FLAKING SYSTEM~~	~~8760~~	~~DAY CYCLONE~~	0	0.00	
4912-0008-0006	202-03	111	BLDG 201/202 VACUUM	8760	HOFFMAN	700	0.02	
4912-0009-0005	208-09	121	BLDG 208 VACUUM	8760	HOFFMAN	700	0.02	
4750-0029-0074	201-20		HOMINY FEED BINS ASPIRATION	8760	DONALDSON 276RFW12	21,000	0.47	
~~4860-0018-0003~~	~~208-11~~	~~124~~	~~FTS DRYER~~	~~8760~~	~~CORONA 15 CYCLONE~~	0	0.00	
					Subtotal	22,400	0.50	
~~PEUG5 SOYBEAN OIL EXTRACTION~~								
	~~Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.~~			~~0.0056~~	~~gr/acf~~			
~~4750-0007-0004~~	~~204-01~~	~~136~~	~~SOLVENT EXT SOLVENT RECLAIM~~	~~8760~~	~~MIN OIL ABSORBER~~	~~0~~	~~Consent Decree~~	~~0~~
~~4750-0002-0018~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #1~~	~~8760~~	~~DAY CYCLONE~~	~~0~~	~~0.00~~	
~~4750-0002-0020~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #2~~	~~8760~~	~~DAY CYCLONE~~	~~0~~	~~0.00~~	
~~4750-0002-0022~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #3~~	~~8760~~	~~DAY CYCLONE~~	~~0~~	~~0.00~~	
~~4750-0002-0024~~	~~210-01~~	~~135~~	~~MEAL DRY & COOL CYCLONE #4~~	~~8760~~	~~DAY CYCLONE~~	~~0~~	~~0.00~~	
					~~Subtotal~~	~~0~~	~~0.00~~	~~0~~
PEUG6 ~~SOYBEAN~~ CORN MILL PRODUCTS MILLING AND HANDLING								
	General: Base emissions on 2000 PM10 test on 101-05 filter exhaust.			0.00060	gr/acf			
	Cyclones: Base emissions on 1995 PM test on DTDC cyclone exhaust.			0.0055	gr/acf			
4750-0029-0032	201-01	92	HOMINY BINNING	8760	APM 40240.8	30,000	0.67	
4750-0029-0001	201-10	101	HOMINY GRIND GEN ASP	8760	APM 40224.4	21,000	0.47	
~~4750-0023-0017~~	~~202-02~~	~~110~~	~~KAOLIN/CALCIUM BIN REC~~	~~8760~~	~~APM 16050.8~~	2,600	0.06	
4912-0004-0022	225-01	126	TRUCK HOMINY LOADOUT	8760	376RF8	34,960	0.78	
4912-0003-0011	226-01	127	RAIL HOMINY/GRAIN LOADOUT #1	8760	376RF12	34,960	0.78	
~~4750-0029-0061~~	~~212-02~~	~~128~~	~~MEAL BINNING~~	~~8760~~	~~WEIDENMAN~~	15,640	0.35	
4750-0033-0001	234-01	130	LTMS & RAIL MEAL/GRAIN TRANSFER	8760	376RF8	20,000	0.45	
4750-0033-0011	234-02	130	LTMS & RAIL MEAL/GRAIN LOADOUT	8760	MAC 144MCF416	34,600	0.77	
4750-0025-0015	201-19		FLOUR PELLET COOLER	8760	MAC HE 39	8,000	2.55	
4750-0029-0045			HOMINY SCREENER GEN ASP	8760	MICROPUL 100S-6-20	7,600	0.17	
4750-0033-0000A			LTMS TRUCK/RAIL DUMP	75,000 tons	-	-	0.01	
4750-0033-0000B			LTMS TRUCK LOADOUT	75,000 tons	-	-	0.4	
4912-0000-0000			HOMINY LOADOUT FUGITIVES	2801	-	-	1.9	
4912-0000-0001			GRAIN LOADOUT FUGITIVES	5867			0.10	
					Subtotal	209,360	9.4	
BOILER HOUSE/GROUNDS								
			General: Base emissions on best estimate.	0.005	gr/acf			
			Coal receiving:	0.02	#/ton received			
~~FM-26~~		~~143~~	~~F&M PACKAGE BOILER~~	~~8,760~~	~~LOW NOx~~			
~~CFB BOILER~~		~~144~~	~~CFB FLUIDIZED BED BOILER~~	~~8,760~~	~~BAGHOUSE & NOx Red~~			
~~F-1000~~			~~COAL RECEIVING FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-109~~			~~COAL CRUSHER FUGITIVES~~	~~8,760~~	~~fugitives~~		0.00	
~~F-1001~~			~~ASH LOADOUT FUGITIVES~~		~~fugitives~~		0.00	
~~CP-104~~			~~REINJECTION BIN~~	~~8,760~~	~~M2~~	0	0.00	
~~F-104~~			~~COAL BUNKER~~	~~8,760~~	~~M3~~	0	0.00	
~~F-105~~			~~LIMESTONE SILO~~	~~8,760~~	~~M4~~	0	0.00	
~~F-103~~			~~COAL SILO~~	~~8,760~~	~~M5~~	0	0.00	
~~F-101~~			~~ASH SILO PNEUMATIC RECEIVER~~	~~8,760~~	~~M6~~	0	0.00	
~~F-102~~			~~ASH SILO BINVENT & LOADOUT FILTER~~	~~8,760~~		0	0.00	
~~CP-104A~~			~~SYSTEM C STORAGE~~	~~8,760~~	~~M7~~	0	0.00	
~~F-108~~			~~COAL HANDLING~~	~~8,760~~	~~F-108~~	0	0.00	
DG-100		152	EMERGENCY GENERATOR	100				
TK-108		153	FUEL OIL TANK	8,760	150,000 GAL			0.016
~~L-OIL-3~~			~~GASOLINE VEHICLE TANK~~	~~8,760~~	~~500 gallons~~			0.000
					Subtotal	0	0.0	0.016

SOURCE NUMBER	PLANT ID	STATE ID	SOURCE NAME	OPERATION SCHEDULE HOURS/YEAR	CONTROL TYPE	EXHAUST CFM	EMISSIONS TONS/YEAR PM10	EMISSIONS TONS/YEAR VOC

TOTAL PLANT

							HAPS					
	PM10	SO2	NOx	NMVOM	CO	Pb	n-hexane	HF	HCl	NH3	Hg	PM2.5
	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
process sources	55.8	0	0	0.0	0	0	0					25.4
~~solvent extraction~~												
~~CFB~~												
~~FM~~												
Emergency Generator	0.08	0.04	2.60	0.07	0.60	-	-	-	-	-	-	0.08
small boiler house	1.50	2.02	39.00	2.26	63.35		0.74			1.5	0.00014	0.78
fuel handling				0.016								
TOTAL PLANT	57.4	2.1	41.6	2.3	64.0	0.0	0.7	0.0	0.0	1.5	0.00014	26.3

TOTAL PLANT	104.9
GRAND TOTAL	105

PART 79.3

FEE	$18.50	PER TON
ANNUAL FEE	$1,942.50	

BUNGE MILLING, INC.
Facility ID 183020ABT

4/21/2011

EMISSIONS PTE REPORT
WORKSHEET

YEAR- max

Process Materials Loadout - Rail #1

PM Emission Factor	0.27	lb/ton	(AP-42, Section 9.11.1, Table 4.5)			
PM10 Emission Factor	0.04	lb/ton	(Vegetable Oil Processing)		SCC 3-02-007-91	
PM10/PM ratio	0.15	AIRS Mar 1990				
PM2.5/PM10 ratio	0.067					
Rate/hour	336,000	pounds	% of scale weight	0.0%	soy meal/soy bean	**Operation Schedule**
	168	tons		10.1%	BPMOE/corn	8 hr/day
Rate/year	940,999	tons hominy		82.0%	germ/corn	7 days/week
Capture efficiency	90	% aspirated loadout hood				51 weeks/yr
Operation	2801	hours/year - increased by 100% to reflect actual loadout rate				

Potential PM emissions, excluding fugitives = Emission factor * process rate* capture effy/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture effy/100)
= 40.8 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
= 114.3 tons/year

Potential PM10 emissions, excluding fugitives = Emission factor * process rate*(capture eff/100)

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture eff/100)
= 6.0 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year/(2000 lb/ton)*(capture effy/100)
= 16.9 tons/year

Potential fugitive PM emissions = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly
= 4.5 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y)/100)/(2000 lb/ton)
= 12.7 tons/year

Potential fugitive PM10 emissions = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= 0.7 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
= 1.9 tons/year

Potential fugitive PM2.5 emissions = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= 0.045 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
= 0.13 tons/year

Grain Loadout - Rail #1

PM Emission Factor	0.027	lb/ton	(AP-42, Section 9.9.1.1, Table 9.9.1-1)			
PM10 Emission Factor	0.0022	lb/ton	Grain Elevators & Processes		SCC 3-02-005-63	
PM2.5 Emission Factor	0.00037			Operation Schedule		
Rate/hour	300,000	pounds	5000 BU	TYPICAL	MAXIMUM	
	150	tons		8	23	hr/day
Rate/year	880,000	tons	29,333,333 BU	5	5	days/week
Capture efficiency	90	% aspirated loadout hood		50	51	weeks/yr
Operation	5867	hours/year		2000	5867	

Potential PM emissions, excluding fugitives = Emission factor * process rate* capture effy/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture effy/100)
= 3.6 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
= 10.7 tons/year

Potential PM10 emissions, excluding fugitives = Emission factor * process rate*(capture eff/100)

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture eff/100)
= 0.30 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
= 0.87 tons/year

Potential PM2.5 emissions, excluding fugitives = Emission factor * process rate*(capture eff/100)

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture eff/100)
= 0.050 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
= 0.15 tons/year

Potential fugitive PM emissions = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= 0.41 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y)/100)/(2000 lb/ton)
= 1.2 tons/year

Potential fugitive PM10 emissions = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= 0.033 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
= 0.10 tons/year

Potential fugitive PM2.5 emissions = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= 0.0056 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
= 0.016 tons/year

Rail Loadout #1 Baghouse

Filter	34,960	dscfm	
Outlet loading	0.000596	gr/dscfm	Basis: Emissions of 2000 PM10 test on 101-05 filter exhaust.
Operation	8760	hours/year	
PM:PM10 ratio	1:01	worst case	
PM2.5: PM10 ratio	0.5:1	Basis: Delphos, Ohio tests of bean receiving baghouse filter	

Maximum controlled PM emissions from filter = baghouse outlet grain loading * gas flow rate

a. Max Hourly

= (outlet loading gr/scf)*(air flow cfm)*(60 min/hour)/(7000 grains/lb)
= 0.18 pounds/hour

b. Max Yearly

= max hourly * hrs/yr / 2000 lb/ton
0.78 tons/year

Maximum controlled PM10 emissions from filter

= baghouse outlet grain loading * gas flow rate

a. Max Hourly

= (outlet loading gr/scf)*(air flow cfm)*(60 min/hour)/(7000 grains/lb)
= 0.18 pounds/hour

b. Max Yearly

= max hourly * (hrs/yr) /(2000 lb/ton)
0.78 tons/year

Maximum controlled PM2.5 emissions from filter

= baghouse outlet grain loading * gas flow rate

a. Max Hourly

= (outlet loading gr/scf)*(air flow cfm)*(60 min/hour)/(7000 grains/lb)
= 0.09 pounds/hour

b. Max Yearly

= max hourly * (hrs/yr) /(2000 lb/ton)
0.39 tons/year

Totals

Fug PM		Baghs		Total	
13.9	tpy	0.78	tpy	14.7	tpy
Fug PM10					
1.98	tpy	0.78	tpy	2.8	tpy
Fug PM2.5					
0.142	tpy	0.39	tpy	0.53	tpy

Emissions PTE Report

Bunge Milling Inc.
Danville, IL
183020ABT
LTMS Grain Handling

Revised: 2-Sep-04

The Long Term Meal System (LTMS) was permitted, constructed and initially operated in 1985 (approval 85010031). The approval was for a pneimatic conveying system from existing meal and grain storage to LTMS, a meal bulk storage building, conveying from LTMS storage to rail loadout, a meal rail loadout system and an associated dust control RJ baghouse. Subsequently approval 01070073 was granted for the construction of 24 elevated meal loadout bins, replacement of the pneumatic conveying system with totally enclosed belt conveyors and a second dust control filter - MAC. The aspiration system was revised for improved dust control. See attached flow diagrams. EU 4750-0033-0001 applies to the operations associated with the LTMS RJ filter; EU 4750-033-0011 to those asociated with the LTMS MAC filter.

The existing LTMS system includes a receiving pit aspirated to the LTMS MAC filter, as documented in the application for the MAC filter, etc. The pit has historically been used to off-load meal from rail cars due either to quality or gross weight concerns. The drag conveyor below the pit feeds the conveying system normally used to elevate meal into the LTMS storage building. The conveying system is aspirated to the LTMS RJ filter. This application requests approval to receive grain from either hopper rail cars or hopper trucks at the LTMS aspirated pit for storage in LTMS. After temporary storage the grain will be loaded into hopper bottom trucks and received at the grain elevator. Therefore, additional handling versus grain normally handled at the elevator includes the LTMS receiving and loadout operation. Filter emissions are curently permitted. Any handling of grain will subtract from time available for the handling of meal, and associated operation of the two aspiration systems.

New emissions associated with grain receiving and loadout at LTMS (August 2004).

LTMS TRUCK/RAIL DUMP
4750-0033-0011

PM Emission Factor	0.035	lb/ton	(Table 9.9.1-1, Hopper Truck Receiving AP-42, 3/03)	
PM10 Emission Factor	0.0078	lb/ton	SCC30200552 & 30200553	
PM10/PM ratio	0.22		Operation at capacity	
Unloading rate/hour	300	tons		20 hours/day
Unloading rate/year	75,000	tons	maximum limit requested	12.5 days/year
Capture efficiency	95	%	due to shed enclosure and aspiration	~2 week/year
Pit area	21.8	sq ft		
Pit aspiration	4364	ACFM		
Pit aspiration face velocity	200	fpm		
Operation	250	hours/year	at capacity	250 hours/year

Potential PM emissions due to grain unloading, excluding fugitives = Emission factor * process rate * capture effy/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture effy/100)
= 10.0 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
= 1.2 tons/year

Potential PM10 emissions due to grain unloading, excluding fugitives = Emission factor * process rate *(capture eff/100)

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture eff/100)
= 2.2 lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year/(2000 lb/ton)*(capture effy/100)
= 0.3 tons/year

Potential fugitive PM emissions due to grain unloading	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	0.53 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y)/100)/(2000 lb/ton)
	=	0.1 tons/year
Potential fugitive PM10 emissions due to grain unloading	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	0.1 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
	=	0.01 tons/year

All grain handling systems except for the receiving pit are totally enclosed with no potential emissions. Emisions of the LTMS MAC filter are currently permited at 8760 hours of operation per year.

LTMS GRAIN HANDLING
4750-0033-0001
All grain handling systems are totally enclosed or inside the LTMS building with no potential emissions. Emisions of the LTMS RJ filter are currently permited at 8760 hours of operation per year.

LTMS TRUCK LOADOUT
4750-0033-0000
Grain loadout will be conducted by endloader operating inside the LTMS building loading the hopper of a belt style truck loader, also located inside the building, which will discharge the grain into the transfer haul hopper trucks.

PM Emission Factor	0.086	lb/ton	(Table 9.9.1-1, Truck Loadout AP-42, 3/03)		
PM10 Emission Factor	0.029	lb/ton	SCC30200560		
PM10/PM ratio	0.34		Operation at capacity		
Unloading rate/hour	300	tons		20	hours/day
Unloading rate/year	75,000	tons maximum limit requested		12.5	days/year
Capture efficiency	60	% due to shed enclosure		~2	week/year
Operation	250	hours/year at capacity		250	hours/year

Potential PM emissions due to grain loadout, excluding fugitives	=	Emission factor * process rate * capture effy/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*(capture effy/100)
	=	15.5 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
	=	1.9 tons/year
Potential PM10 emissions due to grain loadout, excluding fugitives	=	Emission factor * process rate *(capture eff/100)
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*(capture eff/100)
	=	5.2 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year/(2000 lb/ton)*(capture effy/100)
	=	0.7 tons/year

Potential fugitive PM emissions due to grain loadout	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	10.3 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y)/100)/(2000 lb/ton)
	=	1.3 tons/year
Potential fugitive PM10 emissions due to grain loadout	=	Emission factor * process rate * (100-Capture efficiency)/100
a. Max Hourly	=	(lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
	=	3.5 lbs/hour
b. Max Yearly	=	(lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
	=	0.44 tons/year

Increase in potential emissions - all fugitive - August 2004

	Tons per year		Lbs per hour	
	PM	PM10	PM	PM10
LTMS TRUCK/RAIL DUMP	0.1	0.01	0.5	0.1
LTMS GRAIN HANDLING	0.0	0.0	0.0	0.0
LTMS TRUCK LOADOUT	1.3	0.4	10.3	3.5
Total	1.4	0.4	10.8	3.6
Monthly			0.17	0.06

Existing potential emissions - filter exhaust point sources

LTMS & RAIL MEAL TRANSFER - RF	0.45	0.45	0.10	0.10
LTMS & RAIL MEAL LOADOUT - MAC	0.77	0.77	0.18	0.18
Total	1.2	1.2	0.3	0.3
Monthly			0.003	0.003
Grand Total	2.6	1.7	11.1	3.9
Monthly			0.2	0.1

Allowed Emissions

$E=2.54P^{0.534}$

P =	300 tph max
E =	53.41 pph
Max operation	500 hours/yr
Allowed emissions	13.35 tpy

BUNGE MILLING, INC.
Facility ID 183020ABT 4/21/2011

EMISSIONS PTE REPORT
WORKSHEET

YEAR- max

All grain receiving operations

PM Emission Factor	0.18	lb/ton	(Table 9.9.1-1, Straignht Truck Receiving AP-42, 5/98)		
PM10 Emission Factor	0.059	lb/ton	SCC30200551		
PM10/PM ratio	0.33		Operation		
Unloading rate/hour		tons		16	hours/day
Bushels processed	bushels	tons			
corn	36,500,000	1,022,000			
beans/wheat	27,000,000	810,000			
Unloading rate/year	1,832,000	tons		340	days/year
Capture efficiency	90	% due to shed enclosure and aspiration			week/year
Operation	5,440	hours/year		5,440	hours/year

Potential PM emissions due to grain unloading, excluding fugitives = Emission factor * process rate * capture effy/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture effy/100)
= lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)/(2000 lb/ton)*(capture effy/100)
= 148.4 tons/year

Potential PM10 emissions due to grain unloading, excluding fugitives = Emission factor * process rate *(capture eff/100)

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*(capture eff/100)
= lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year/(2000 lb/ton)*(capture effy/100)
= 48.6 tons/year

Potential fugitive PM emissions due to grain unloading = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y)/100)/(2000 lb/ton)
= 16.5 tons/year

Potential fugitive PM10 emissions due to grain unloading = Emission factor * process rate * (100-Capture efficiency)/100

a. Max Hourly = (lb/ton)*(unload rate ton/hour)*((100-eff'y)/100)
= lbs/hour

b. Max Yearly = (lb/ton)*(unload rate ton/year)*((100-eff'y/100))/(2000 lb/ton)
= 5.4 tons/year

BUNGE MILLING, INC.
Facility ID 183020ABT

4/21/2011

EMISSIONS PTE REPORT
WORKSHEET

Note: The maximum heat input at any one time will be the capacity of the main boiler. However, both boilers may be operated at any one time, say when one boiler is being brought on line and the other being taken off line.

MAIN BOILER - B&W FM 1556

Emission factors for natural gas combustion are from AP42, Tables 1.4-1,-2,-3, July 1998, except for NOx. The #1 boiler has a low NOx n-gas burner as of 2004.

Heat input/boiler	96.55 MBH - NG	SCC 1-02-006-02		NOx	67	ppm	0.08	lb/MMBtu	82	lb/MMCF	
	94.8 MBH - FO			CO	200	ppm	0.15	lb/MMBtu	154	lb/MMCF	

Boiler #1	Unit	PM (lb/unit)	PM10 (lb/unit)	PM2.5 (lb/unit)	SO2 (lb/unit)	NOx (lb/unit)	VOC (lb/unit)	CO (lb/unit)	Hexane (lb/unit)	Hg (lb/unit)	NH3 (lb/unit)
	million cu. ft. burned	1.9	7.6	1.9	0.6	82	5.5	154	1.8	2.60E-04	3.2

Natural gas usage	=	822.741	Million cu ft/year		max	basis	1028	Btu/cf	8760	hr/yr	
		68.6	Million cu ft/month				1565.337	cf/min	n gas	NOx	0.080 #/mmBtu
	=	511.3	Million cu ft/year	at typical	60	MBH	30,000	cf/min	maximum		
		42.6	Million cu ft/month				19,000	cf/min	typical		

Fuel Use	PM	PM10	PM2.5	SO2	NOx	VOM	CO	Hexane	Hg	NH3
Mcf/yr	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
822.7	0.78	3.13	0.78	0.25	33.73	2.26	63.35	0.74	0.000107	1.32
	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
	0.18	0.71	0.18	0.056	7.70	0.5	14.46	0.17	0.000024	0.30

Emission factors for fuel oil combustion taken from AP42, Tables 1.3-1 & -3,September 1998. SCC 1-02-005-02

Heat input	140,000 BTU/gal	0.03% S: sulfur content			NOx	134	ppm	0.17	lb/MMBtu	24	lb/M gal
					CO	200	ppm	0.16	lb/MMBtu	22	lb/M gal

	Unit	PM (lb/unit)	PM10 (lb/unit)	PM2.5 (lb/unit)	SO2 142S*lb/unit	NOx (lb/unit)	NMVOM (lb/unit)	CO (lb/unit)	Hexane (lb/unit)	Hg (lb/unit)	NH3 (lb/unit)
	1000 gal burned	2	2	0.25	4.26	24	0.34	22	1.5	1.13E-04	0.8

Fuel oil usage	=	850.000	1000 gal/yr	based on	7.472	weeks use at max capacity					
		455.0	1000 gal/mo								
		528.2	1000 gal/yr	at typical	60	MBH				NOx	0.171 #/mmBtu
		282.8	1000 gal/mo							PM	0.0143
										SO2	0.0304

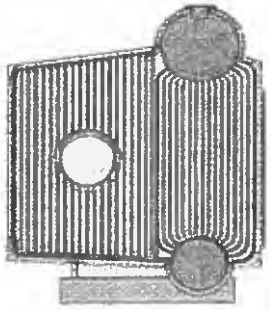
Fuel Use	PM	PM10	PM2.5	SO2	NOx	NMVOM	CO	Hexane	Hg	NH3
1000 gal/yr	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
850.000	0.85	0.85	0.11	1.81	10.20	0.14	9.35		0.000048	0.34

	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
	1.4	1.4	0.17	2.9	16.3	0.2	14.90		0.000077	0.54
Maximum hourly rate: either NG or FO	1.4	1.4	0.18	2.9	16.3	0.5	14.90	0.17	0.000077	0.54
Typical	0.84	0.84	0.11	1.79	10.10	0.32	9.26	0.11	0.000048	0.34

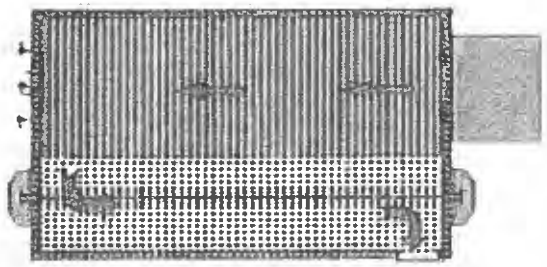
Main Boiler emissions	PM ton/year	PM10 ton/year	PM2.5 ton/year	SO2 ton/year	NOx ton/year	NMVOM ton/year	CO ton/year	Hexane ton/year	Hg ton/year	NH3 ton/year
N-Gas	0.78	3.13	0.78	0.25	33.73	2.26	63.35	0.74	1.07E-04	1.32
Fuel Oil	0.85	0.85	0.11	1.81	10.20	0.14	9.35	0.00	4.80E-05	0.34
Annual Total	1.52	3.53	0.78	2.02	39.0	2.26	63.35	0.74	0.00014	1.47
Typical	0.94	2.19	0.49	1.26	24.24	1.41	39.37	0.46	0.000087	0.91
Significant emission rates	25	15	10	40	40	40	100	10	NA	NA
Below sig em rate?	yes	yes	yes	yes	yes	yes	yes	yes	NA	NA

Note: When Fuel Oil pollutant hourly emission rate is greater than that for N-GAS, the annual Total is = Fuel Oil + N-GAS * (52-7.472)/52, since the Fuel Oil emissions are based on 7.472 weeks of operation at capacity on Fuel Oil. When the opposite is the case the Total = N-GAS total.

B&W D type



Vertical Cross Section



Horizontal Cross Section

CLAYTON BOILER

Emission factors for natural gas combustion are from AP42, Tables 1.4-1,-2,-3, March 03. SCC 1-02-006-02 and FIRE

452.267 cf/min n gas
6,000 cf/min maximum
6,000 cf/min typical

Heat input/boiler 27.89583 MBH
Number of boilers 1

Unit	PM (lb/unit)	PM10 (lb/unit)	PM 2.5 (lb/unit)	SO2 (lb/unit)	NOx (lb/unit)	VOM (lb/unit)	CO (lb/unit)	Hexane (lb/unit)	Hg (lb/unit)	NH3 (b/unit)
million cu. ft. burned	1.9	7.6	1.9	0.6	100.0	5.5	84	1.8	2.60E-04	3.2

Natural gas usage = 237.712 Million cu ft/year max basis 1028 Btu/cf 8760 hr/yr
19.8 Million cu ft/month
= 9.1 Million cu ft/year at typical operation of 2 weeks/yr NOx 0.097 #/mmBtu
9.1 Million cu ft/month

Fuel Use	PM	PM10	PM 2.5	SO2	NOx	VOM	CO	Hexane	Hg	NH3
Mcf/yr	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
237.7	0.23	0.90	0.23	0.071	11.9	0.65	9.98	0.214	0.000031	0.38
	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
	0.052	0.21	0.052	0.016	2.7	0.15	2.28	0.049	0.0000071	0.087

Emission factors for fuel oil combustion taken from AP42, Tables 1.3-1 & -3,September 1998. SCC 102005-02

Heat input 140,000 BTU/gal 0.03% S: sulfur content

	Unit	PM (lb/unit)	PM10 (lb/unit)	PM2.5 (lb/unit)	SO2 142S*lb/unit	NOx (lb/unit)	NMVOM (lb/unit)	CO (lb/unit)		Hg (lb/unit)	NH3 (lb/unit)
	1000 gal burned	2.00	3.3	0.25	4.26	20	0.34	5.0		1.13E-04	0.8

Fuel oil usage = 850.000 1000 gal/yr based on the total fuel oil limit for both boilers 25.392 weeks use at max capacity

145.5 1000 gal/mo based on boiler capacity

66.9 1000 gal/yr at typical operation of 2 weeks/yr

66.9 1000 gal/mo

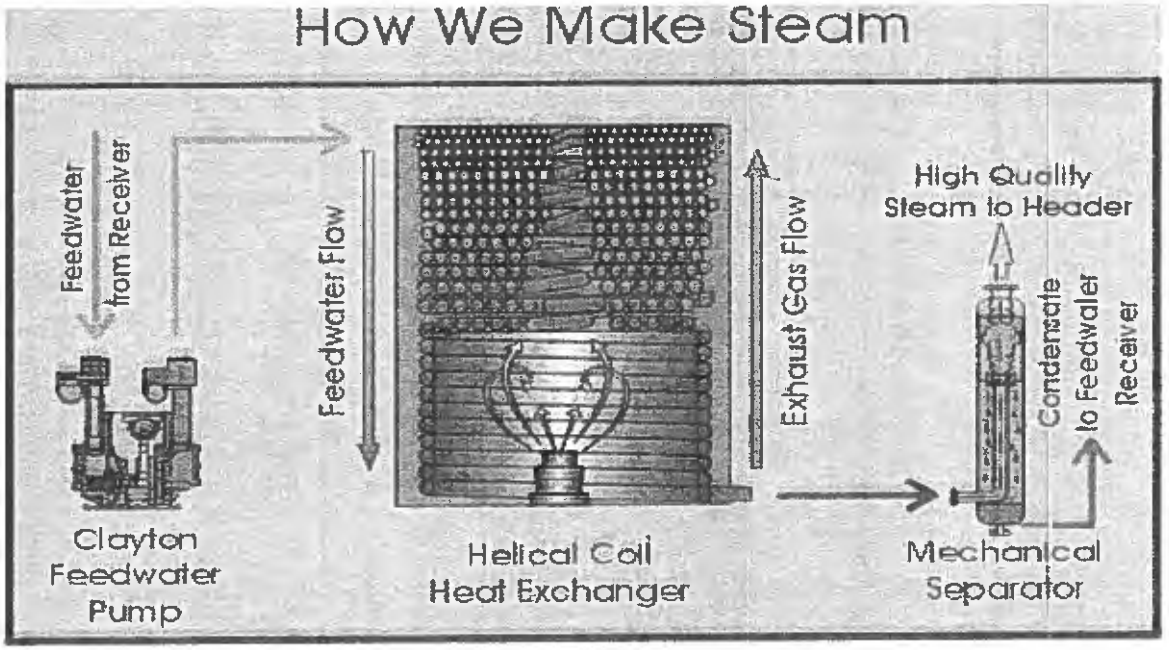
NOx	0.143 #/mmBtu
PM	0.0236
SO2	0.0304

	Fuel Use	PM	PM10	PM2.5	SO2	NOx	NMVOM	CO	Hexane	Hg	NH3
	1000 gal/yr	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year		ton/year	ton/year
	850.000	0.85	1.40	0.106	1.81	8.50	0.145	2.13		0.000048	0.340
		lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr		lb/hr	lb/hr
		0.40	0.7	0.05	0.85	4.0	0.07	1.00		0.000023	0.16
	Maximum	0.40	0.7	0.052	0.85	4.0	0.15	2.3	0.05	0.000023	0.16
	Typical	0.052	0.21	0.052	0.016	2.71	0.15	2.3	0.05	0.0000071	0.087

Backup Boiler emissions		PM ton/year	PM10 ton/year	PM2.5 ton/year	SO2 ton/year	NOx ton/year	NMVOM ton/year	CO ton/year	Hexane ton/year	Hg ton/year	NH3 ton/year
	N-Gas	0.23	0.90	0.23	0.07	11.89	0.65	9.98	0.21	3.09E-05	0.38
	Fuel Oil	0.85	1.40	0.11	1.81	8.50	0.14	2.13	0.00	4.80E-05	0.34
	Annual Total	1.0	1.9	0.23	1.85	14.6	0.7	10.0	0.2	6.38E-05	0.38
	Typical	0.0087	0.035	0.0087	0.0027	0.46	0.025	0.38	0.0082	0.0000012	0.015
Significant emission rates		25	15	10	40	40	40	100	10	NA	
Below sig em rate?		yes	yes	yes	yes	yes	yes	yes	yes	NA	

Note: When Fuel Oil pollutant hourly emission rate is greater than that for N-GAS, the Annual Total is = Fuel Oil + N-GAS * (52-25.392)/52, since the Fuel Oil emissions are based on 25.392 weeks of operation at capacity on Fuel Oil. When the opposite is the case the Annual Total = N-GAS total.

The following drawing shows a generic diagram of the boiler provided by Clayton Industries



BUNGE MILLING, INC.
Facility ID 183020ABT

4/21/2011

EMISSIONS PTE REPORT
WORKSHEET

Emergency generator

2168 HP
115 kW
7000 Btu/hp-hr
15.176 MMBtu/hr
0.050 % sulfur in #2 FO
100 hr/yr max operation for testing purposes

	lb/hp-hr	lb/hr	ton/yr
NOx	0.024	52.03	2.60
CO	0.0055	11.92	0.60
SOx	4.05E-04	0.88	0.04
CO2	1.16	2514.88	125.74
PM	0.0007	1.52	0.08
NMVOC	0.00064155	1.39	0.07

Emssion factors from AP42, Table 3.4-1, 10/96

Kras, Kim

From: James Burris <James.Burris@bunge.com>
Sent: Tuesday, June 1, 2021 2:00 PM
To: Barria, German
Subject: [External] Automatic reply: Bunge North America, Inc., - ID #183020ABT

I will be out of the office until Monday, June 7, 2021 I will respond to your email when I return. If you need assistance sooner, please contact my supervisor Michelle Bublitz at michelle.bublitz@bunge.com.

This message is intended only for the named recipient and may contain confidential, proprietary or legally privileged information.
No confidentiality or privilege is waived or lost by any misdirected transmission.
If you received this message in error, please notify us immediately by telephone at +1 314 292-2000 and immediately delete this message from your system.
If you are not the intended recipient, you must not use, disclose, distribute or copy any part of this message.

Kras, Kim

From: Bernoteit, Bob
Sent: Wednesday, June 2, 2021 9:00 AM
To: Barria, German
Subject: RE: Bunge North America, Inc., - ID #183020ABT
Attachments: 96020027 - Bunge North America, Inc..xlsx

German,

Here is the spreadsheet that I said that I would send to you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, June 1, 2021 1:58 PM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc., - ID #183020ABT

Hello Mr. Burris,
I'm contacting you in regard to the Permit application for federally enforceable state operating permit (FESOP)
For Bunge North America, Inc., located at 321 E. North Street, Danville, Vermilion County,
ID #183020ABT, permit application #96020027, a draft of the permit has been developed, see attached file.
Further, to continue with de review of these permit , we need the following

1. A fugitive dust plant for the source.
2. Bunge to review the draft permit and provide us with their comments.

Attached are also documents that will help with the development of a source Fugitive Particulate Operating Program (FPOP).

Don't hesitate to contact me if you have any questions.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

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Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	PM & PM10 EMISSIONS (lbs/Hour)	(Tons/Yr)
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):				
Truck Dump #1	0.0017	18,500	0.27	1.18
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.01	0.06
West Headhouse Transfer General Aspiration	0.0017	55,000	0.80	3.51
RHOMBO Truck Dump Pit #3	0.0017	14,500	0.21	0.93
Railcar Dump Pit	0.0017	27,000	0.39	1.72
RHOMBO West General Aspiration	0.0017	6,800	0.10	0.43
RHOMBO Gallery Aspiration	0.0017	9,200	0.13	0.59
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Conveying General Aspiration	0.00085	7,600	0.06	0.24
Grain Receiving Fugitives				5.40
			Subtotal:	14.15
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):				
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Subtotal:	6.71
Dry Corn Milling, Processing and Products Handling:				
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
South APM Binning	0.0006	30,000	0.15	0.68
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95

South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.00	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.00	0.01
Lab Filter	0.0006	900	0.00	0.02
AB Fin Product Surge Bin North	0.0006	742	0.00	0.02
AB Fin Product Surge Bin South	0.0006	742	0.00	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.00	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.00	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.00	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.00	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.00	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.00	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.00	0.01
1/2 Flour Surge Bin	0.0006	500	0.00	0.01
3/4 Flour Surge Bin	0.0006	500	0.00	0.01
7/8 Flour Surge Bin	0.0006	570	0.00	0.01
9/10 Flour Surge Bin	0.0006	570	0.00	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.00	0.02
Milk Bins	0.0006	400	0.00	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03

Soy Meal Surge Bin	0.0006	500	0.00	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.00	0.02
Tri Cal Bins	0.0006	780	0.00	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.00	0.01
Bin 509	0.0006	509	0.00	0.01
Bin 508	0.0006	500	0.00	0.01
Bin 310	0.0006	500	0.00	0.01
Bin 309	0.0006	500	0.00	0.01
9/10 Pulvicron Receiver	0.0006	700	0.00	0.02
Milk Bins	0.0006	807	0.00	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.00	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.00	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.00	0.01
Ingredient Bin 602	0.0006	210	0.00	0.01
Ingredient Bin 603	0.0006	210	0.00	0.01
Ingredient Bin 604	0.0006	210	0.00	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.00	0.01

Pellet Bins	0.0006	705	0.00	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.00	0.01
Bldg 112 Vacuum	0.0006	500	0.00	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Round Bin General Aspiration	0.0006	7,134	0.04	0.16
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
North Hominy Feed	0.0006	14,000	0.07	0.32
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Bin 945 Germ Receiver	0.0006	1,800	0.01	0.04
Extrusion Receiver	0.02	4,000	0.69	3.00
108 A-Bin Receiver	0.02	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.02	682	0.12	0.51
PCM Hammermill	0.002	7,200	0.12	0.54
USG Hammermill	0.002	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.02	4,000	0.69	3.00
			Subtotal:	29.00
Corn Mill Products Storage				
Bldg 201/202 Vacuum	0.0006	700	0.00	0.02
Bldg 208 Vacuum	0.0006	700	0.00	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Subtotal:	0.50
Corn Mill Products Milling and Handling:				
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78

Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Subtotal:	7.78

	Throughput			PM Emissions
Emission Unit	Tons/Month	Tons/year	lb/Ton	Tons/Month
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02
LTMS Truck Loadout	12,500	75,000	0.086	0.27
				Total:

14.15

6.71

29.00

0.50

9.52 8.35

PM10 Emissions			
Tons/year	lb/Ton	Tons/Month	Tons/year
0.13	0.0078	0.00	0.03
1.61	0.029	0.09	0.54
1.74			0.57

Boiler #1:

	mmscf/month	mmscf/year
Natural Gas Usage:	82.274	822.741

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84	3.46	34.56
Nitrogen Oxides (NO_x)	50	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

	Gallons/month	Gallons/Year
Distillate Fuel Oil Usage:	141,667	850,000

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5	0.35	2.13
Nitrogen Oxides (NO_x)	20	1.42	8.50
Particulate Matter (PM)	3.3	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.2	0.01	0.09

Clayton Boiler:

	mmscf/month	mmscf/year
Natural Gas Usage:	23.771	237.712

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84	1.00	9.98
Nitrogen Oxides (NO_x)	100	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

	Gallons/month	Gallons/Year
Distillate Fuel Oil Usage:	141,667	850,000

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5	0.35	2.13
Nitrogen Oxides (NO_x)	20	1.42	8.50

Particulate Matter (PM)	3.3	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.2	0.01	0.09

Emergency Generator Set DG-100

Rated Engine Power (hp): 2168
Hours of Operation 100 hours/year

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	Emissions (Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.00
Volatile Organic Material (VOM)	0.000642	1.39	0.07

Kras, Kim

From: Barria, German
Sent: Wednesday, June 2, 2021 9:01 AM
To: Bernoteit, Bob
Subject: RE: Bunge North America, Inc., - ID #183020ABT

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Wednesday, June 2, 2021 9:00 AM
To: Barria, German <German.Barria@Illinois.gov>
Subject: RE: Bunge North America, Inc., - ID #183020ABT

German,

Here is the spreadsheet that I said that I would send to you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, June 1, 2021 1:58 PM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc., - ID #183020ABT

Hello Mr. Burris,
I'm contacting you in regard to the Permit application for federally enforceable state operating permit (FESOP)
For Bunge North America, Inc., located at 321 E. North Street, Danville, Vermilion County,
ID #183020ABT, permit application #96020027, a draft of the permit has been developed, see attached file.
Further, to continue with de review of these permit , we need the following

1. A fugitive dust plant for the source.
2. Bunge to review the draft permit and provide us with their comments.

Attached are also documents that will help with the development of a source Fugitive Particulate Operating Program (FPOP).

Don't hesitate to contact me if you have any questions.

Thank you.

German Barria

Environmental Protection Specialist.,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

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Kras, Kim

From:	Barria, German
Sent:	Wednesday, April 13, 2022 10:03 AM
To:	James Burris
Cc:	Bernoteit, Bob
Subject:	Bunge North America, In. - ID: 183020ABT
Attachments:	Bunge North America, Inc., - ID #183020ABT

Good morning Mr. Burris,
We received an application for a construction permit (App No. 22040008) on April 8, 2022. We also sent Bunge a draft of their FESOP back in June 1, 2021 for their review, as well as we requested a fugitive dust plan.
We will need a fugitive dust plan in order to process this application for construction.
Further, this source is located in an Environmental Justice Area (E.J), as so, IEPA has been requesting applicant for construction permit to what emission limits they request in construction permit, to offset them in their source overall operating permit limits. In this application Bunge proposes a permit limit for the S 105 Roof Carter-Day Filter of PM/PM10: 3.05 tons/year, PM2.5: 1.52 tons/year, we will like to see that been reduced in some where else in the limits that are proposed in the draft FESOP.

Please don't hesitate to contact me if you have any questions.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

Kras, Kim

From:	Barria, German
Sent:	Tuesday, June 1, 2021 1:58 PM
To:	James Burris
Cc:	Bernoteit, Bob
Subject:	Bunge North America, Inc., - ID #183020ABT
Attachments:	96020027 - Bunge North America Inc - FESOP - 06-01-2021.docx; Fugitive Dust Handbook 2006.pdf; FUGITIVEFORM.pdf; FUGITIVEPARTICULATE.doc; Inspection Manual For PM 10 Emissions From Paved Unpaved Roads And Storage Piles.pdf

Hello Mr. Burris,
I'm contacting you in regard to the Permit application for federally enforceable state operating permit (FESOP) For Bunge North America, Inc., located at 321 E. North Street, Danville, Vermilion County, ID #183020ABT, permit application #96020027, a draft of the permit has been developed, see attached file.
Further, to continue with de review of these permit , we need the following

1. A fugitive dust plant for the source.
2. Bunge to review the draft permit and provide us with their comments.

Attached are also documents that will help with the development of a source Fugitive Particulate Operating Program (FPOP).

Don't hesitate to contact me if you have any questions.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
1021 NORTH GRAND AVENUE, EAST
SPRINGFIELD, ILLINOIS 62702

OPERATING PROGRAM FOR FUGITIVE PARTICULATE CONTROL

1. THIS FORM IS USED TO APPLY FOR A FUGITIVE DUST OPERATING PROGRAM AS REQUIRED BY 35 IAC 212.309. COMPLETE THE FORM, KEEP ONE COPY FOR YOUR RECORDS, AND RETURN TWO COPIES TO THE ATTENTION OF BUREAU OF AIR PERMIT SECTION MANAGER AT THE ADDRESS LISTED ABOVE.

2a. NAME OF OWNER:		3a. NAME OF OPERATOR:	
2b. STREET ADDRESS OF OWNER:		3b. STREET ADDRESS OF OPERATOR:	
2c. CITY OF OWNER:		3c. CITY OF OPERATOR:	
2d. STATE OF OWNER:	2e. ZIP CODE:	3d. STATE OF OPERATOR:	3e. ZIP CODE:

4a. NAME OF CORPORATE DIVISION OR PLANT:		4b. STREET ADDRESS OF EMISSION SOURCE:		
4c. CITY OF EMISSION SOURCE:	4d. LOCATED WITHIN CITY LIMITS: ☐ YES ☐ NO	4e. TOWNSHIP:	4f. COUNTY:	4g. ZIP CODE:

5. SUBMIT A SCALE MAP SHOWING ALL STORAGE PILES, CONVEYOR LOADING OPERATIONS, STORAGE PILE ACCESS ROADS, NORMAL TRAFFIC ROADS, PARKING FACILITIES, LOCATION OF UNLOADING AND TRANSPORTING OPERATIONS WITH POLLUTION CONTROL EQUIPMENT.

6a. DO STORAGE PILES CONTAIN A TOTAL OF MORE THAN 260,000 TONS OF MATERIAL IN A CALENDER YEAR? ☐ YES ☐ NO

6b. IF THE ANSWER TO 6a WAS YES, PLEASE SUBMIT THE FOLLOWING INFORMATION.

TOTAL AMOUNT OF MATERIAL IN THE STORAGE PILES: TONS/YEAR

AND SUBMIT AN ATTACHED SHEET DESCRIBING:

I) DETAILED OPERATING PROCEDURES AND CONTROL METHODS BY WHICH FUGITIVE PARTICULATES FROM THESE STORAGE PILES WILL BE MINIMIZED DURING LOADING, UNLOADING, PILE MAINTENANCE, AND WIND EROSION. HOW OFTEN WILL THESE PILES BE TREATED WITH SURFACTING AGENT? NAME THE TYPE AND CONCENTRATION OF SURFACTANT THAT WILL BE USED.

II) TYPE OF CONTROL METHODS USED FOR FUGITIVE PARTICULATE EMISSIONS FROM CONVEYOR LOADING OPERATIONS AND NORMAL TRAFFIC PATTERN ROADS SERVING THESE STORAGE PILES. IF SURFACTING AGENT IS USED STATE TYPE AND CONCENTRATION OF SURFACTING AGENT AND FREQUENCY OF ITS USE.

III) TYPE OF CONTROL METHODS USED FOR FUGITIVE PARTICULATE EMISSIONS FROM ALL PAVED OR UNPAVED PARKING LOTS AND NORMAL TRAFFIC PATTERN ROADS AT THIS FACILITY. IF ROADS ARE PAVED INDICATE FOOTAGE OF ROADS THAT WILL BE PAVED AND HOW FREQUENTLY THESE ROADS WILL BE CLEANED.

7. DOES THIS FACILITY HAVE ANY OF THE FOLLOWING SOURCES?	
a.) CRUSHERS	☐ YES ☐ NO
b.) GRINDING MILLS	☐ YES ☐ NO
c.) SCREENING OPERATIONS	☐ YES ☐ NO
d.) BUCKET ELEVATORS	☐ YES ☐ NO
e.) CONVEYORS	☐ YES ☐ NO
f.) CONVEYOR TRANSFER POINTS	☐ YES ☐ NO

g.) BAGGING OPERATIONS	☐ YES ☐ NO
h.) STORAGE BINS	☐ YES ☐ NO
i.) FINE PRODUCT TRUCK AND TRAILER LOADING OPERATIONS	☐ YES ☐ NO
j.) UNLOADING AND TRANSPORTING OPERATIONS OF MATERIAL COLLECTED BY POLLUTION CONTROL EQUIPMENT	☐ YES ☐ NO
k.) UNPAVED NORMAL TRAFFIC ROADS	☐ YES ☐ NO
l.) PAVED NORMAL TRAFFIC ROADS	☐ YES ☐ NO
m.) INPAVED PARKING LOTS	☐ YES ☐ NO
n.) PAVED PARKING LOTS	☐ YES ☐ NO

7b. FOR EACH SOURCE MARKED YES, ATTACH AN ADDITIONAL SHEET DESCRIBING THE TYPE OF CONTROL METHODS THAT WILL BE USED TO CONTROL FUGITIVE PARTICULATE EMISSIONS. IF SURFACTANT IS USED, STATE THE TYPE AND CONCENTRATION OF SURFACTANT AND FREQUENCY OF ITS APPLICATION. IF THE ROADS AND PARKING LOTS ARE PAVED, STATE THE FREQUENCY OF CLEANING.

8. VEHICULAR MILES TRAVEL INFORMATION:
THIS INFORMATION IS TO BE DETERMINED BY THE NUMBER OF CARS MULTIPLIED BY THE DISTANCE TRAVELED FOR THE FOLLOWING ROADS.

I) TRAFFIC ON UNPAVED NORMAL TRAFFIC ROADS IN	MILES PER YEAR
II) TRAFFIC ON PAVED NORMAL TRAFFIC ROADS IN	MILES PER YEAR
III) TRAFFIC ON UNPAVED PARKING LOTS IN	MILES PER YEAR
IV) TRAFFIC ON PAVED PARKING LOTS IN	MILES PER YEAR

9. IS THIS FUGITIVE PARTICULATE CONTROL PROGRAM IMPLEMENTED AT THE PRESENT? ☐ YES ☐ NO

10.

AUTHORIZED SIGNATURE (S): (D)

BY _____ _____ BY _____ _____
SIGNATURE DATE SIGNATURE DATE

_____ _____
TYPED OR PRINTED NAME OF SIGNER TYPED OR PRINTED NAME OF SIGNER

_____ _____
TITLE OF SIGNER TITLE OF SIGNER

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
RHOMBO Truck Dump Pit #3 (5012-0003-0013) controlled by Baghouse Filters APM SJL156-6;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12;
RHOMBO West General Aspiration (5012-0009-0009) controlled by Baghouse Filters APM SJL72-6;
RHOMBO Gallery Aspiration (5012-0003-0018) controlled by Baghouse Filters APM SJL72-6;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;
Conveying General Aspiration (4750-0029-0015) controlled by Baghouse Filters MICROPUL 100S-6-20;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
South APM Binning (4880-0034-0035) controlled by Baghouse Filters APM 41144.12;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;

AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;
AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;

Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;

#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Round Bin General Aspiration (4750-0029-0027) controlled by Baghouse Filters APM 14072.6;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
North and South Hominy Feed (4860-0018-0007 and 4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed,

no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent,

into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0

	Metric	English
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code

212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve

the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code

214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing

on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company

associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less

than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 80.510(b), beginning June 1, 2010. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all nonroad (NR) and locomotive (LM) diesel fuel is subject to the following per-gallon standards:

i. Sulfur content 15 ppm maximum for NR diesel fuel.

ii. Cetane index or aromatic content, as follows:

A. A minimum cetane index of 40; or

B. A maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. The Fugitive Particulate Operating Program, as submitted by the Permittee on DATE PROGRAM APPROVED BY FOS WAS RECEIVED is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program

within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
RHOMBO Truck Dump Pit #3	0.0017	14,500	0.21	0.90
Railcar Dump Pit	0.0017	27,000	0.39	1.70
RHOMBO West General Aspiration	0.0017	6,800	0.09	0.40
RHOMBO Gallery Aspiration	0.0017	9,200	0.14	0.60
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Conveying General Aspiration	0.00085	7,600	0.05	0.24
Grain Receiving Fugitives				5.40
			Total:	14.02

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
South APM Binning	0.0006	30,000	0.15	0.68
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Round Bin General Aspiration	0.0006	7,134	0.04	0.16
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
North Hominy Feed	0.0006	14,000	0.07	0.32
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Bin 945 Germ Receiver	0.0006	1,800	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
			Total:	29.00

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

	Throughput			E M I S S I O N S PM			PM_{10}	
Emission Unit	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original

test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control

equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Condition 22 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40

CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

24. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

25a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

26a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a

contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

27. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

28a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance

Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

29. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

30a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

31a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

   A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

   B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 31(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

32. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

33a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major

source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

   i. An existing stationary CI RICE located at an area source of HAP emissions.

   ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

   i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is

specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during

the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

34. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

35a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

36a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			14.02	14.02		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			29.00	29.00		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.66	65.49	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

1. SUBPART K: FUGITIVE PARTICULATE MATTER

2. Section 212.301 Fugitive Particulate Matter

No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

3. Section 212.302 Geographical Areas of Application

a) Sections 212.304 through 212.310 and 212.312 of this Subpart shall apply to all mining operations (SIC major groups 10 through 14), manufacturing operations (SIC major groups 20 through 39 except for those operations subject to Subpart S of this Part (Grain-Handling and Grain-Drying Operations) that are outside the areas defined in Section 212.324(a)(1) of this Part), and electric generating operations (SIC group 491), which are located in the areas defined by the boundaries of the following townships, notwithstanding any political subdivisions contained therein, as the township boundaries were defined on October 1, 1979, in the following counties:

Cook:	All townships
Lake:	Shields, Waukegan, Warren
DuPage:	Addison, Winfield, York
Will:	DuPage, Plainfield, Lockport, Channahon, Peotone, Florence, Joliet
Peoria:	Richwoods, Limestone, Hollis, Peoria, City of Peoria
Tazewell:	Fondulac, Pekin, Cincinnati, Groveland, Washington
Macon:	Decatur, Hickory Point
Rock Island:	Blackhawk, Coal Valley, Hampton, Moline, South Moline, Rock Island, South Rock Island
LaSalle:	LaSalle, Utica
Madison:	Alton, Chouteau, Collinsville, Edwardsville, Fort Russell, Godfrey, Granite City, Nameoki, Venice, Wood River
St. Clair	Canteen, Caseyville, Centerville, St. Clair, Stites, Stookey, Sugar Loaf, Millstadt.

b) In the geographical areas defined in Section 212.324(a)(1) of this Part, Sections 212.304 through 212.310, 212.312, and 212.316 of this Subpart shall apply to all emission units identified in subsection (a) of this Section, and shall further apply to the following operations: grain-handling and grain-drying (Subpart S of this Part), transportation, communications, electric, gas, and sanitary services (SIC

major groups 40 through 49). Additionally, Sections 212.304 through 212.310, 212.312, and 212.316 of this Subpart shall apply to wholesale trade-farm supplies (SIC Industry No. 5191) located in the vicinity of Granite City, as defined in Section 212.324(a)(1)(C) of this Part.

c) Emission units must comply with subsection (b) of this Section by May 11, 1993, or upon initial start-up, whichever occurs later.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

4. Section 212.304 Storage Piles

a) All storage piles of materials with uncontrolled emissions of fugitive particulate matter in excess of 45.4 Mg per year (50 T/yr) which are located within a source whose potential particulate emissions from all emission units exceed 90.8 Mg/yr (100 T/yr) shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method, in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of this Subpart.

b) Subsection (a) of this Section shall not apply to a specific storage pile if the owner or operator of that pile proves to the Agency that fugitive particulate emissions from that pile do not cross the property line either by direct wind action or reentrainment.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

5. Section 212.305 Conveyor Loading Operations

All conveyor loading operations to storage piles specified in Section 212.304 of this Subpart shall utilize spray systems, telescopic chutes, stone ladders or other equivalent methods in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of this Subpart.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

6. Section 212.306 Traffic Areas

All normal traffic pattern access areas surrounding storage piles specified in Section 212.304 of this Subpart and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed,

in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of this Subpart.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

7. Section 212.307 Materials Collected by Pollution Control Equipment

All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

(Source: Amended at 3 Ill. Reg. 45, p. 100, effective October 26, 1979)

8. Section 212.308 Spraying or Choke-Feeding Required

Crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

(Source: Amended at 3 Ill. Reg. 45, p. 100, effective October 26, 1979)

9. Section 212.309 Operating Program

a) The emission units described in Sections 212.304 through 212.308 and Section 212.316 of this Subpart shall be operated under the provisions of an operating program, consistent with the requirements set forth in Sections 212.310 and 212.312 of this Subpart, and prepared by the owner or operator and submitted to the Agency for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

b) The amendment to this Section incorporating the applicability of Section 212.316 shall apply by May 11, 1993, or upon initial start-up, whichever occurs later.

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

10. Section 212.310 Minimum Operating Program

As a minimum the operating program shall include the following:

a) The name and address of the source;

b) The name and address of the owner or operator responsible for execution of the operating program;

c) A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

d) Location of unloading and transporting operations with pollution control equipment;

e) A detailed description of the best management practices utilized to achieve compliance with this Subpart, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

f) Estimated frequency of application of dust suppressants by location of materials; and

g) Such other information as may be necessary to facilitate the Agency's review of the operating program,

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

11.

12. Section 212.312 Amendment to Operating Program

The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with this Subpart and shall be submitted to the Agency for its review.

(Source: Amended at 3 Ill. Reg. 45, p. 100, effective October 26, 1979)

13. Section 212.313 Emission Standard for Particulate Collection Equipment

If particulate collection equipment is operated pursuant to Sections 212.304 through 212.310 and 212.312 of this Subpart, emissions from such equipment shall not exceed 68 mg/dscm (0.03 gr/dscf).

(Source: Amended at 20 Ill. Reg.7605, effective May 22, 1996)

14. Section 212.314 Exception for Excess Wind Speed

Section 212.301 of this Subpart shall not apply and spraying pursuant to Sections 212.304 through 212.310 and 212.312 of this Subpart shall not be required when the wind speed is greater

United States
Environmental Protection
Agency

Air And Radiation
(EN-341)

EPA 340/1-89-007
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EPA

Inspection Manual For PM-10 Emissions From Paved/ Unpaved Roads And Storage Piles

Inspection Manual for PM-10 Emissions From Paved/ Unpaved Roads and Storage Piles

Final Report

U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Stationary Source Compliance Division (EN-341)
401 M Street, SW
Washington, D.C. 20460

Attn: Mr. Robert Marshall, Jr.

EPA Contract No. 68-02-4463
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PREFACE

This report was prepared for the U.S. Environmental Protection Agency's Stationary Source Compliance Division under Contract No. 68-02-4463, Work Assignment No. 17. Mr. Robert Marshall, Jr. was the EPA Work Assignment Manager. The work was performed in Midwest Research Institute's Environmental Systems Department (Dr. Chatten Cowherd, Director). The report was prepared by Mr. John Kinsey (Task Leader), Ms. Deann Hecht, and Mr. Frank Pendleton.

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October 27, 1989

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SECTION 1

INTRODUCTION

1.1 GENERAL OVERVIEW

The Clean Air Act (CAA) of 1970 (and amended in 1977). was passed "to protect and enhance the quality of the Nation's air resource so as to promote the "public health and welfare and the productive capacity of its population." More specifically, the CAA provides the U.S. Environmental Protection Agency (EPA) with the broad responsibility and authority to implement a federal program to achieve these goals.

The interstate nature of air pollution caused Congress to charge the EPA with the responsibility of establishing uniform national ambient air quality standards (NAAQS) to assure consistency in protecting public health and welfare. These standards were set for those pollutants which the administrator identified as widespread (emitted by numerous or diverse mobile and stationary sources) and endangering public health and welfare. These so-called "criteria" pollutants come from the fact that the CAA (Section 108) requires the EPA to issue Air Quality Criteria Documents for each pollutant having an ambient air quality standard.

Through July of 1987 the EPA has identified seven criteria pollutants and promulgated national ambient air quality standards for: particulate matter, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons (revoked in January 1983), ozone, and lead. Of interest in this document is the NAAQS for PM_{10} promulgated on July 1, 1987. The NAAQS for PM_{10} specifies a 24 h primary and secondary standard of 150 $\mu g/m^3$ and an annual primary and secondary standard of 50 $\mu g/m^3$ (calculated as an annual arithmetic mean).

To attain and subsequently maintain the NAAQS for PM_{10}, each state is required to adopt and submit to EPA a plan providing for the implementation, maintenance, and enforcement of the standards over the entire state. Each SIP includes a major portion devoted to emission limitations and other regulations and programs to prohibit stationary sources from "emitting any air pollutant in amounts which will prevent attainment with the NAAQS or interfere with measures to prevent significant deterioration of air quality" (see Part C of Title 1 of CAA). Thus, each state directs its control regulations towards its unique set of sources and circumstances as long as the end result will be attainment of the NAAQS in the required time frame. An overview of SIP requirements for the control of PM_{10} is contained in Appendix A.

Collection of compliance-related information is used to determine compliance of sources with applicable regulations, to identify sources which may be in violation, and to provide evidence to support enforcement actions. The primary method of compliance monitoring is the on-site inspection. Under the CAA, authority has been granted to inspectors for the determination of compliance with applicable standards and regulations. This authority, under Section 114 of the CAA, is described briefly in Appendix B.

1.2 SCOPE AND OBJECTIVES OF INSPECTION MANUAL

This manual outlines the basic procedures necessary to complete an informative and accurate air compliance inspection for sources of fugitive PM_{10}. In addition, it addresses other topics relevant to the on-site inspection and compliance monitoring including the selection of sources for inspection, record keeping and reporting reviews, inspection safety, and technical inspection procedures. The role of opacity measurements is also briefly addressed. However, record keeping is primarily emphasized. An overview of the inspector's general responsibilities, safety, and preparations is provided in Appendix C with more detailed information on specific sources contained in subsequent sections.

The information in this inspection guide is based, in part, on a previous EPA document, "Control of Open Fugitive Dust Sources," EPA 450/3-88-008. Information useful to the inspector may also be found in that document. It provides examples for computing both controlled and uncontrolled PM_{10} emissions, potential regulatory formats, and additional information on various control techniques.

SECTION 2

INSPECTION OVERVIEW

2.1 INTRODUCTION

This section provides an overview of the key elements that together constitute a set of inspection procedures for fugitive sources. First, an introduction to fugitive dust sources, emissions, and controls is presented. The section then discusses baseline inspections, typical permit conditions for roads and storage piles, applicable record-keeping procedures, and sampling and analysis methods for aggregate materials. Finally, field equipment and on-site health and safety considerations are addressed.

2.1.1 Fugitive Dust Sources

Sources of fugitive particulate emissions may be separated into two broad categories--process sources and open dust sources. Process sources of fugitive emissions are those associated with industrial operations that alter the chemical or physical characteristics of a feed material. Open dust sources are those that entail generation of fugitive emissions of solid particles by the forces of wind or machinery acting on exposed materials. Only open dust sources are discussed in this document.

The partially enclosed storage and transfer of materials to or from a process operation do not fit well into either of the two categories of fugitive particulate emissions defined above. Examples are partially enclosed conveyor transfer stations and front-end loaders operating within buildings. Nonetheless, partially enclosed materials handling operations will be classified in this manual as open sources.

Open dust sources include both industrial sources of particulate emissions associated with the transport, storage, and transfer of raw, intermediate, and waste aggregate materials, as well as nonindustrial sources such as unpaved roads and parking lots, paved streets and highways, heavy construction activities, building demolition, and agricultural tilling. Generic categories of open dust sources are listed in Table 2-1.

There is a wide variety of industrial facilities that contain fugitive PM_{10} sources. Examples of industrial operations which could be evaluated by an inspector include asphalt plants, cement plants, mines and processing facilities, concrete ready-mix plants, power plants, quarries and rock products plants, slag processing plants, steel mills, transfer terminals, building demolition, and landfills.

TABLE 2-1. GENERIC CATEGORIES OF OPEN DUST SOURCES

1. Unpaved Travel Surfaces
   - Roads
   - Parking lots and staging areas
   - Storage piles

2. Paved Travel Surfaces
   - Streets and highways
   - Parking lots and staging areas

3. Exposed Areas (wind erosion)
   - Storage piles
   - Bare ground areas

4. Materials Handling and Storage
   - Batch drop (dumping)
   - Continuous drop (conveyor transfer, stacking)
   - Pushing (dozing, grading, scraping)

5. Building Demolition

6. Transfer Terminals
   - Ship loading and unloading
   - Rail facilities

Although the types of sources found in industrial and urban settings are generally similar (e.g., an unpaved road found in sand and gravel plant and an unpaved city street), the quantity of emissions generated and the type(s) of control applied may be quite different. Therefore, the inspector is cautioned to evaluate each source on an individual basis.

2.1.2 Particulate Emission Factor Models

In developing particulate control strategies for "traditional" pollutant concerns (i.e., to meet National Ambient Air Quality Standards [NAAQS]), particulate emissions from open sources are estimated using the predictive emission factors presented in Section 11.2 of EPA's "Compilation of Air Pollutant Emissions Factors" (AP-42).[1] Further details on these emission factors can be found in the EPA document entitled, "Control of Open Fugitive Dust Sources," EPA 450/3-88-008. These factors cover the generic source categories:

- Unpaved travel surfaces
- Paved travel surfaces

- Exposed areas (wind erosion)
- Materials handling

These emission factors share many common features. For example, the models are formulated as empirical expressions that relate variations in emission factor (e) to differences in the physical properties (p) of the material being disturbed and the mechanical energy (m) responsible for the generation of particulate according to the general form:

$$e = Kp^a m^b \qquad (2\text{-}1)$$

As empirical models, open dust source factors have adjustable coefficients (K,a,b) that reflect relationships determined from actual open dust source testing. Table 2-2 provides the correction parameters used in the emission factor models published in AP-42 for the above open dust sources.

TABLE 2-2. CORRECTION PARAMETERS FOR AP-42 EMISSION FACTOR MODELS[a]

Source category	Model parameter	Units of measure
Unpaved roads	Silt content of a surface material	Weight %
	Mean vehicle speed	km/h (mph)
	Mean vehicle weight	Mg or 10^6 g (tons)
	Mean No. of wheels	Dimensionless
	No. of wet days per year	Dimensionless
Paved roads	Silt content of a surface material	Weight %
	Total surface dust loading	kg/km^2 (lb/mi^2)
Exposed areas	No. of disturbances per year	Dimensionless
	Erosion potential	g/m^2
Materials handling	Mean wind speed	m/s (mph)
	Material moisture content	Weight %

[a] From Reference 1.

2.1.3 Preventive and Mitigative Control Options

Typically, there are several options for control of fugitive particulate emissions from any given source. This is clear from the mathematical equation used to calculate the emissions rate:

$$R = A\ e\ (1 - c) \qquad (2\text{-}2)$$

where: R = estimated mass emission rate
A = source extent (i.e., surface area for most open dust sources)
e = uncontrolled emission factor, i.e., mass of uncontrolled emissions per unit of source extent
c = fractional efficiency of control

To begin with, because the uncontrolled emission rate is the product of the source extent and uncontrolled emission factor, a reduction in either of these two variables produces a proportional reduction in the uncontrolled emission rate.

Although the reduction of source extent results in a highly predictable reduction in the uncontrolled emission rate, such an approach in effect usually requires a change in the process operation. Frequently, reduction in the extent of one source may necessitate the increase in the extent of another, as in the shifting of vehicle traffic from an unpaved road to a paved road.

In the case of open sources, the reduction in the uncontrolled emission factor may be achieved by adjusted work practices. The degree of the possible reduction of the uncontrolled emission factor can be estimated from the known dependence of the factor on source conditions that are subject to alteration. For open sources, this information is embodied in the predictive emission factor equations for fugitive dust sources as presented in Section 11.2 of EPA's "Compilation of Air Pollutant Emission Factors" (AP-42).[1]

Control techniques can be divided into two broad categories--preventive and mitigative. Although differences between the two are not always clear, in general, preventive measures involve techniques that reduce source extent or improve mechanical source operations relative to the generation of particulate emissions. By contrast, mitigative techniques typically focus on altering the surface/material conditions that constitute the source of particulate emissions.

The reduction of source extent and adjusted work practices which reduce the amount of exposed dust-producing material are preventive techniques for control of fugitive dust emissions. This would include, for example, the elimination of mud/dirt carryout onto paved roads at construction and demolition sites.

On the other hand, mitigative measures involve the periodic removal of dust-producing material. Examples of mitigative measures include cleanup of spillage on travel surfaces (paved and unpaved) and cleanup of material spillage at conveyor transfer points.

Most of the mitigative control measures for open sources involve periodic rather than continuous control application. Familiar examples are the watering of unpaved travel surfaces and the cleaning of paved travel surfaces. The resultant control efficiency follows a cyclic pattern, decaying in time from the highest value immediately after application. Because of the finite durability of these control techniques, ranging from hours to months, it is essential to relate an average efficiency value to a frequency of application. It must be emphasized that the rate of control efficiency decay is heavily dependent upon the source and control variables discussed in Sections 3, 4 and 5.

2.1.4 Compliance Determination

There are three general compliance formats that are potentially suited to open dust sources. These are:

a. opacity (visible emissions) readings;

b. evaluation of control program records--record keeping; and

c. "indirect" determination(s) of control performance.

These formats are described briefly below.

As a compliance tool, the determination of visible emissions (VE) has a long history of application to stationary sources. VE readings appear appealing as a compliance tool for open dust sources; in fact, two states (Tennessee and Ohio) as well as EPA have promulgated VE methods for open dust sources. A summary of the state methods is presented in Appendix D with EPA Reference Method 22 provided in Appendix E.

Record keeping offers another, easily used compliance tool for fugitive PM_{10} controls. As the name implies, record keeping involves the routine collection and recording of appropriate control application parameters (especially for periodically applied measures) by the source operator for the permitted sources at the facility. These application parameters are generally specified as part of a formal dust control plan and are critical to achieving a certain level of control performance. The level of detail needed for record keeping purposes varies with the control option employed. Record keeping, together with on-site inspections, as required, will allow the regulator to estimate performance of a dust control program.

While record keeping affords a convenient method of assessing long-term control performance, it is important that regulatory personnel have "spot-check" compliance tools at their disposal. For example, permit conditions could be written specifying a minimum surface moisture content (thus, corresponding to a minimum control efficiency) to be maintained on an unpaved

surface which is watered or treated with surfactants or salts. Inspection personnel would then collect grab samples for moisture analysis to determine compliance following the procedures discussed later in this section. This technique is referred to as an "indirect" performance standard which is enforced in lieu of actual source testing.

2.2 BASELINE INSPECTIONS

The purpose of this section is to describe the Baseline Inspection Technique and illustrate how it should be applied to the common types of fugitive dust sources. The Baseline Technique is an approach which inspectors can use to obtain relevant data in an organized fashion. These procedures are organized into four categories that roughly correspond to increasing levels of effort. The inspection procedures have been developed to ensure that the data obtained are as accurate and complete as possible. The procedures outlined should be used by field personnel unless technical or safety considerations at a specific site demand modified approaches. In such a case the reasons for the deviation from the standard procedures should be briefly described in the inspection report.

2.2.1 Inspection Categories

It would be desirable to conduct detailed engineering-oriented inspections at all sources, however, this is obviously impractical due to the large number of sources inspected regularly by EPA, state, and local regulatory personnel. Therefore, inspection categories have been incorporated into the overall inspection program to give agencies the opportunity to properly allocate limited resources. The most complete and time-consuming evaluations are performed only when preliminary information indicates the potential for a significant emission problem.

Inspection categories are designated as Levels 1 through 4 with the intensity of the evaluation increasing from one to another. The types of activities normally associated with each level and the experience necessary to conduct the different types of inspections vary substantially. The four categories are:

- Level 1 inspection is a field surveillance tool intended to provide relatively frequent, but very incomplete indications of source performance. No entry to the plant grounds is usually necessary, and the inspection is never announced in advance. The inspector makes observations on all sources which are visible from the plant boundary and which can be properly observed, given prevailing meteorological conditions. To the extent possible, general plant operations are observed to determine whether they correspond to permit requirements.

- Level 2 inspection is a limited "walk-through" evaluation of the source and its control(s). Entry to the facility is necessary. Therefore, appropriate administrative inspection procedures (Appendix C) should be followed. The inspection can be performed

either in a concurrent (i.e., with the process flow) or countercurrent fashion depending on the anticipated types of problems. In either case the inspection data gathered is limited to that which can be provided by readily available existing information.

- Level 3 inspection includes a detailed evaluation of individual emission sources, types of control techniques employed, source operation, and identification of potential problem areas. Source material analyses may be reviewed and samples obtained for later evaluation. Control techniques and application parameters would also be identified for further engineering analysis. Sufficient data and documentation is also obtained on-site to ascertain if control procedures are being followed as specified by permit or regulatory requirements.

- Level 4 inspection involves the observation of a source test(s) or evaluation of an on-site air quality monitoring program specifically intended to measure control performance. This is a very specialized inspection and should be conducted with full knowledge of the source/control specifications being evaluated. This type of inspection is performed explicitly for the purpose of determining compliance with permit conditions, regulations, and/or site-specific dust control plans.

An important part of the level 3 inspection is the preparation of general material flow charts and site plans. It is recommended that these be prepared in accordance with the guidelines presented in Reference 2. As a starting point, the inspector should request a map of those portions of the plant of interest. Specific flow charts should be prepared so that all of the important information concerning material flow streams, traffic flow and volumes, and locations of all stationary equipment and material storage areas are clearly shown. These charts then are used to perform the on-site inspection.

2.2.2 Assembling Background Information

The inspector's knowledge of the source(s) and the associated controls at a facility plays an important part in the success of an inspection, particularly in the diagnosis of control problems. It is, therefore, highly recommended that the inspector build his or her own and/or an agency technical library of books, reports, guideline documents, and other publications related to the inspection process. This should include materials addressing specific dust-emitting sources, operation and maintenance of all types of controls, and specific inspection procedures for various types of controls and dust sources.

To assist in assembling background information, Table 2-3 provides a list of useful references involving the control of fugitive dust and PM_{10}. Although this list is not all-encompassing, these documents should definitely be available to regulatory personnel prior to making an inspection of an unfamiliar facility or source.

TABLE 2-3. FUGITIVE DUST REFERENCE DOCUMENTS

U.S. Environmental Protection Agency. 1988. Compilation of Air Pollutant Emission Factors, AP-42. U.S. Environmental Protection Agency, Research Triangle Park, North Carolina.

Grelinger, M. A. 1988. Gap Filling PM_{10} Emission Factors for Selected Open Area Dust Sources. EPA-450/4-88-003, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina.

Cowherd, C., G. E. Muleski, and J. S. Kinsey. 1988. Control of Open Fugitive Dust Sources. EPA-450/3-88-008. U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. September.

Cowherd, C., Jr., and J. S. Kinsey. 1986. Identification, Assessment and Control of Fugitive Particulate Emissions. EPA-600/8-86-023, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina.

U.S. Environmental Protection Agency. 1982. Control Techniques for Particulate Emissions From Stationary Sources--Volumes 1 and 2. EPA-450/3-81-005a and b, Emission Standards and Engineering Division, Research Triangle Park, North Carolina. September.

Ohio Environmental Protection Agency. 1980. Reasonably Available Control Measures for Fugitive Dust Sources. Columbus, Ohio. September.

Guidelines for Development of Control Strategies in Areas With Fugitive Dust Problems. 1977. OAQPS No. 1.2-071. U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. October.

Climatic Atlas of the United States. 1968. U.S. Department of Commerce, Washington, D.C. June.

2.2.3 General Inspection Procedures

Although fugitive dust control measures are generally implicit in federal air quality regulations, the regulations generally do not explicitly include readily enforceable standards of performance. However, a number of states have (as part of their State Implementation Plans [SIPs] for PM_{10}) developed and adopted rules to control fugitive dust emissions. These rules are enforceable by either state, local, or federal air pollution control officials. Clearly, a portion of a general air compliance inspection should be devoted to identifying potential sources of fugitive dust emissions and the collection of data indicative of a source's compliance status with regard to applicable permit conditions and regulations.

As is the case for other types of emission sources, the inspector should be familiar with potential sources of fugitive PM_{10} at the plant and applicable state/local/federal regulations and permit requirements. Preentry evaluation from outside the plant (i.e., level 1 inspection) is particularly important in regard to fugitive sources. During this evaluation, the inspector should identify and note any visible fugitive emissions at or near plant boundaries and their source(s); conditions around feed, product, and/or waste storage piles; and any other obvious sources of fugitive emissions. Notations of any visible emissions and photographs should be taken at this time, as appropriate.

The portion of the fugitive emissions inspection which is conducted within the plant boundaries (level 2, 3, and 4 inspections) generally consist of four phases:

1. Visual inspection of the facility in order to observe fugitive sources and controls (including photographs to document).

2. Examination of the source's control equipment.

3. Observations of any spraying or other dust control operations undertaken by source during the inspector's visit.

4. Examination of the source's records relating to the controls used.

A general checklist similar to that shown in Table 2-4 should be used as a reminder of key information to be collected by the inspector during a level 2 evaluation. This list should be refined according to the specific goals of the inspection during subsequent visits and can be arranged in chart formats, if desired. Also, the compliance formats described below should be incorporated into the inspection, as applicable.

2.3 TYPICAL PERMIT CONDITIONS

Specific conditions placed on an air permit for open dust sources depend to a large extent on the type of source being permitted as well as the statute and regulations under which the permit is issued. Also, permit conditions will depend on whether the permit is included in revisions to a State Implementation Plan, which are subsequently enforceable by EPA personnel.

TABLE 2-4. GENERAL CHECKLIST FOR CONDUCTING AN INSPECTION OF FUGITIVE SOURCES

Name of facility: _____

Address: _____

Type of facility or SIC code: _____

VISUAL INSPECTION

1. Are all points listed in current permit/control plan still existent?
   _____

2. Are there additional points that are not noted in the files? If so, please note each new point. _____
   _____
   _____

3. For each source, note the type of control being applied (reference to map or plot plan and/or process diagram).

   Source ID: _____
   Type of material processed: _____
   Type of control: _____

   Source ID: _____
   Type of material processed: _____
   Type of control: _____

   Source ID: _____
   Type of material processed: _____
   Type of control: _____

(continued)

TABLE 2-4 (continued)

Source ID: _____
Type of material processed: _____
Type of control: _____

Source ID: _____
Type of material processed: _____
Type of control: _____

4. Does control equipment and/or control measure(s) match the information in the current permit file? If not, specify. _____

5. Does control equipment appear to be well maintained? If not, note that equipment which does not. _____

6. Is there evidence that the source can and does make repairs to control equipment? Specify. _____

INFORMATION FROM SOURCE FILES

1. Does the source have the current permit (and emissions control plan, if applicable) on file and available for inspection? _____

2. Is source operator aware of applicable regulations, permit conditions, and/or control plan specifications under which operation is permitted? _____

(continued)

TABLE 2-4 (continued)

3. Has a regular staff member been assigned to implementation of the control plan? _____

4. Does a budget exist for implementation of the control plan? _____

5. Are permanent facility records being kept in accordance with permit or control plan? _____ If not, what are the deficiencies? _____

6. Is ambient air monitoring being conducted near the facility? _____
How is the monitoring equipment cited relative to fugitive sources?

7. The person to contact regarding fugitive emissions control at facility is: _____ Telephone No.: _____

INSPECTOR'S NAME: _____ DATE OF INSPECTION: _____
TIME OF INSPECTION: _____ REINSPECTION DATE: _____

Because of the wide diversity in permit systems, it is difficult to present "typical permit conditions which apply to all types of generic open dust sources. Therefore, in this section, example conditions will be presented as a guide to the inspector as they may appear on an air permit for a fugitive dust source.

In general, permits for open sources are issued either in response to ambient air quality violations (e.g., sources in nonattainment areas) or, where air quality meets applicable standards, are directed to aesthetic, nuisance, or similar considerations. Where ambient air violations are present, the dust control strategy implemented by the source operator must be very specific. Control application parameters must be rigorously adhered to in order to achieve overall reductions in PM_{10} emissions and thus expected improvements in ambient air quality in the area where the plant is located. A formal schedule and methods of application must be established for each source and control method applied; this is especially true for periodically applied controls used on sources such as paved and unpaved roads.

As mentioned in Section 2.1.4, compliance with a permit condition can be determined either by record keeping or some type of indirect performance standard based on sampling and analysis of the sources material. An example permit condition for sources in areas with air quality problems using record keeping as a measure of compliance might be:

> "Within 90 days of issuance of this permit, the plant operator will submit to the Department a fugitive dust control plan for the following sources . . . . This plan shall include sufficient information to determine the control technique to be used for each emission source, the application parameters for these controls, and the expected level of reduction achieved. Within thirty days after plan submittal, the Director will notify the permittee of plan acceptance of, if found unacceptable, any deficiencies to be corrected. Revisions to the dust control plan shall then be submitted to the Department within 30 days following plan rejection. Appropriate plant records will be kept and submitted to the Department on a monthly basis to verify compliance with the dust control plan."

For sources where indirect measures are used to determine compliance, a permit condition similar to the following might be appropriate:

> "Within 90 days of issuance of this permit, the plant operator will submit to the Department a dust control plan for the following sources . . . . This plan shall include sufficient information to determine the type of control used for each source, the applicable control application parameters, and specific performance goals for each source/control combination. Control performance goals shall be specified in the plan in terms of key source material characteristics (e.g., moisture content) which can be verified by on-site sampling and subsequent laboratory analysis . . . ."

For permits issued for aesthetic, nuisance, or similar considerations where air quality is not a problem, a dust control plan should also be submitted by the source operator. However, in this particular case, some amount of discretion is usually allowed to maintain the dust emissions leaving the site to within some allowable limit. This type of permit is much harder for the inspector to enforce but, if properly handled, can result in adequate dust control. Again, periodically applied controls should be formalized to the extent possible.

For areas where air quality is not an immediate concern, the following could appear on an operating permit for an open dust source:

> "Within 90 days of issuance of this permit, the plant operator will submit the to Department a dust control plan for the following sources . . . . The control measures included in this plan shall be sufficient to preclude dust emissions from leaving the site as determined visually by Department personnel. If, upon inspection, the dust control plan is determined to be inadequate, a revised control plan will be submitted to the Department within 30 days of the inspection . . . ."

Many variations of the above are also possible depending on the statute and regulations in force at the time the permit is issued.

2.4 RECORD KEEPING

As stated previously, record keeping is one alternative method to determine compliance in lieu of an actual performance standard. To implement this technique, records of site activity and control should be submitted to the regulatory agency on a monthly basis. These records must be certified by a responsible party as to their accuracy and completeness. All site records should be maintained by the agency on a permanent basis.

To enforce the permit conditions and/or dust control plan, field audits of key control parameters should be made by inspection personnel. The results of these audits would then be compared to site records submitted to the agency for that period to determine compliance. If differences are found between application of the control(s) observed on-site and those recorded by facility operating personnel, this would constitute a violation and would be grounds for enforcement action. To illustrate this process, an abbreviated example will be given as applied to a typical building demolition project.

Assume a large demolition project consisting of the demolishing of a block of buildings is to be conducted in a large metropolitan area. The site dust control plan calls for watering of all truck routes to and from the active demolition every 2 h as well as cleanup of mud/dirt carryout from the access point on a twice-daily basis. Also, watering of debris during demolition and loadout to haul trucks is to be conducted on days without measurable rainfall. An agency inspector observes the site activity from the public street (Level 1 inspection) for a period of 3 h. During this period no water truck is observed to be in operation, and debris are not watered prior to loading into trucks.

At the end of the month the inspector checks the submittal from the site operators and finds start and stop times for the water truck operator which indicates operation during the observation period. The inspector also notes that the water cannon used for debris control was broken down and was in a repair shop. It is clear from this analysis that the operator is in violation of the dust control plan for watering of unpaved surfaces. Because the truck operator did not follow required dust suppression measures (and/or failed to keep accurate records) an enforcement action could be taken against the site operator.

As noted by the above example, no quantitative data are required for enforcement of the dust control plan. This reduces the need for a set performance standard (e.g., opacity limits) against which the site operator is evaluated. This approach is, however, predicated on the fact that strict implementation of the dust control plan will achieve certain reductions in PM_{10} emissions associated with site operation.

In order to implement record keeping of site control activity, general guidelines are provided in Sections 3, 4, and 5 for paved roads, unpaved roads, and storage piles, respectively. These guidelines include only basic information and should be modified, as necessary, according to the source being monitored. Other information pertaining to control performance determination as related to record keeping is provided in Reference 3.

2.5 SAMPLING AND ANALYSIS TECHNIQUES

Sampling and analysis of source material (i.e., road surface and aggregate materials) can be useful for a number of purposes. First, material characteristics are generally required to calculate uncontrolled PM_{10} emissions for most open dust sources and, in some cases, are used to estimate or verify control effectiveness. For the inspector, material sampling can be used as an indirect measure of control performance as explained previously in Section 2.1.4.

In general sampling of road surface material involves the collection of a composite sample from each road segment being analyzed. For paved roads, this entails collection of samples across the width of the travel lane using a portable, stick-type vacuum cleaner equipped with tared collection bags. In the case of unpaved roads, a whisk broom and dust pan is used in a similar fashion. Details of these techniques are discussed in Appendix F.

For the sampling of aggregate materials, incremental samples are collected from the top, middle, and bottom of storage piles or from the process flow itself. A relatively large gross sample is collected in this manner which is subsequently reduced to laboratory sample which is analyzed. This technique is further described in Appendix F.

Finally, moisture content is determined in the laboratory by drying each sample in a laboratory oven with the silt content determined by dry sieving to obtain the fraction passing a 200 mesh (70 μmP) screen. Details of both techniques as well as special preparation procedures for paved road samples are provided in Appendix F.

2.6 EQUIPMENT PREPARATION

Part of the preinspection preparation involves obtaining and preparing inspection and safety equipment. The type of equipment may vary according to the inspection objectives; the level of inspection; and the process, control equipment, and safety requirements at the facility itself. A general list of recommended equipment is provided in Table 2-5.

All equipment should be checked, calibrated, and tested before use. The inspector is responsible for seeing that all equipment necessary to conduct an inspection is brought to the inspection site.

Safety equipment required for a facility is based on plant health and safety requirements. Safety requirements must be met, not only for safety reasons, but to ensure that the inspector is not denied entry to the facility or parts of it.

TABLE 2-5. RECOMMENDED INSPECTION AND SAFETY EQUIPMENT

Equipment necessary for most inspections	Equipment required for certain inspections
Hard hat	Respirator with appropriate cartridge(s)
Safety glasses or goggles	Air velocity meter
Gloves	Shovel or scoop
Coveralls	Broom-type vacuum sweeper
Safety shoes	Tared vacuum bags and premarked envelopes
Ear protectors	Dustpan and broom
Tape measure	Riffle
Flashlight	Bucket
Stopwatch	Sample containers (polyethylene trash bags and/or screw-top jars)
Duct tape	Self-contained breathing equipment
"NIOSH/OSHA Pocket Guide to Chemical Hazards"	Rope
Rain gear	

As previously stated, Table 2-5 shows a listing of standard inspection and safety equipment for air compliance inspections. It is recommended that those items necessary for the majority of inspections (level 2) be carried in a portable case or tool belt pouch from emission point to emission point. The appropriate items from the list of "Equipment Required for Certain Inspections" (levels 3 and 4 and certain safety equipment not normally required) should be added to the equipment carried or placed in a central location at the plant or in the inspector's car to be retrieved if needed.

Before or after equipment preparation, the inspector must also consider what written materials, forms, documents, etc., he/she will require during the inspection. These should also be gathered and organized before the inspection. These materials may include any or all of the following:

- Maps
- Flow charts
- Plant layout
- Applicable regulations
- Inspection checklists
- Field notebook
- Field observation data recording forms (e.g., Method 22 data sheets)
- Reference materials
- Inspection plan or agenda
- Credentials
- Facility information
- Baseline data
- Information requested by facility

2.7 SAFETY CONSIDERATIONS

The performance of any field inspection always involves a certain degree of risk. It is the objective of this section to describe means of minimizing this risk through adherence to safety procedures. Procedures are presented for most common health and safety problems encountered during the evaluation of fugitive sources and controls. The official EPA Health and Safety Policy can be found in Reference 2.

2.7.1 General Considerations

The inspection of any plant, industrial facility, mine, etc., inherently involves a large number of potential health and safety problems which occur frequently. Therefore, the inspector must be constantly alert so as to avoid potentially hazardous situations.

Inhalation hazards are often created by leaks of pollutant laden gases out of worn expansion joints, cracked welds, and corroded shells of process equipment. The sudden downdraft from nearby stacks and vents can also lead to acute exposures. The partially confined areas can allow high concentrations of toxic material to accumulate even when the leak rates are comparatively small. Most of the high pollutant concentrations occur by accident and without the knowledge of plant personnel. The highly variable conditions make any exposure monitoring data highly questionable. These problems complicate the selection of the proper respirator for these conditions.

The elevated and isolated locations of many types of process equipment also increases the safety risk. It may be necessary to climb permanent or portable ladders to reach the equipment. In some cases, the equipment can only be reached by crossing roofs or elevated walkways. Since these portions of the plant are not regular work areas, even the plant personnel may not be aware of some of the potential problems involved with the ladders and roof areas. Frequently cables, hoses, and debris are found along the elevated

platforms and roofs since plant maintenance personnel do not remove this material. Injuries which occur in these portions of the plant can be very serious. Rescue of injured personnel is difficult and time consuming due again to the isolated and elevated locations of control equipment.

Due to the numerous potential hazards, it is very important that each inspector adhere to established safety policies and procedures. It is also necessary that the inspector recognize unusual and extreme conditions which warrant additional or extreme safety precautions.

To minimize the risk of potential hazards, each inspector should follow the general rules summarized below:

1. The work should be halted immediately when the inspector suffers any nonspecific symptoms of exposure. The area should be approached again only after the proper personal protective equipment has been obtained.

2. The work should be conducted at a controlled pace.

3. If the work cannot be accomplished safely, it should be postponed until the appropriate steps are taken to permit safe inspection.

4. Nothing should be done which risks the health and safety of the inspector, plant personnel, or which risks the conditions of plant equipment.

5. All agency and plant safety requirements must be satisfied at all times.

2.7.2 Specific Safety and Health Procedures

2.7.2.1 General Safety Procedures--
The following general procedures should be adhered to while conducting an inspection:

1. Personal Protective Equipment--Inspectors should bring personal protective equipment necessary to conduct the inspection of the facility. All personal protective equipment should be in good working order and the inspector using it should be trained in its use and limitations.

2. Unaccompanied Inspections--The inspector should request that a responsible plant representative accompany him at all times. The plant representative can identify areas known to be unsafe and can warn the inspector about intermittent plant operations which can result in health and safety risks.

3. Warning Codes and Sirens--The inspector should learn the warning codes and sirens used at the plant to indicate blasting or emergencies such as plant fires, etc. The inspector and plant representative should move to a safe location as rapidly as possible after hearing the warning sirens and report in to the appropriate authorities so that no attempt is made to "rescue" them from the affected area.

4. Personnel Rescue--If an inspector observes another individual who has suffered an accident, help must be summoned immediately. Attempting to rescue the person can jeopardize the rescuer unless the proper procedures are used. Rescue should be attempted only if the proper equipment is available to ensure the safety of the rescuer.

5. Inclement Weather Conditions--Except in the case of public health emergencies, field activities should be interrupted or postponed whenever severe weather conditions present a significant safety risk to the inspector. The specific criteria for interrupting or postponing the field activities should be determined by each office. As a general guideline, work should be delayed whenever: the ambient temperature is less than -20°F (wind chill); the ambient temperature is greater than 100°F; the wind speed is greater than 25 mph; and/or whenever there are sleet and freezing rain conditions.

2.7.2.2 Walking and Climbing Hazards--

Inspectors should wear hard hats at all facilities being inspected. These hats provide protection against collision with overhead beams and protruding obstacles and also provide limited protection against falling objects. Inspectors should also wear safety shoes approved for the specific type of facility being inspected and gloves whenever the inspection will involve climbing of ladders or handling of hot surfaces.

Portions of the facility with potentially slippery surfaces should be avoided to the extent possible. Inspectors should not use temporary "walkways" such as planks and horizontal ladders. Also, before walking on elevated catwalks, the inspector should confirm, to the extent possible, that the supports are intact and have not corroded or rotted.

Accumulations of solids and snow can easily exceed the rated load bearing capacity of roofs. Also, portions of the roof can be made of materials with only a limited load bearing capability. For the above reasons, all roofs and other elevated, horizontal surfaces should be approached cautiously. It is recommended that inspectors follow plant personnel in such areas and that they remain on defined walkways.

In climbing any ladder, the foot rungs should be grasped while climbing even when the rungs are wet or muddy. Under no circumstances should an inspector attempt to climb a ladder covered with ice or snow. Both hands must always be free for climbing ladders.

Portable and fixed ladders in good physical condition should be used. Portable ladders should be inclined on an angle to minimize the chances of slippage or toppling and must extent above the surface being reached by a minimum of 3 ft. The cage (if present) must have an opening ranging from 18 to 24 in at the top. The cage should not be severely distorted since this would prevent easy movement inside. The ladder must have at least 9-in clearance between it and where it is attached to allow secure placement of the feet on the rungs and should extent at least 3 ft above the platform or surface being reached. Finally, guard rails should never be used for climbing.

While walking through the plant, inspectors must be alert for protruding obstacles. Often these are difficult to spot in dimly lit portions of plants. Loose clothing should not be worn when conducting an inspection since this can result in entrapment in rotating equipment. Inspectors must be cautious when in the vicinity of all rotating equipment since it is often impossible to see the components moving at high speed. Equipment which operates intermittently, such as hoists, should never be touched since this equipment often starts automatically and without warning.

Inspectors should stay at least 75 ft from stationary rail cars at sidings since these are sometimes coupled to remote-controlled engines run by an operator without a complete view of the siding areas. Inspectors should also not stand on coal piles and other material stockpiles since it is possible to become entrapped in the conveying equipment which is often underneath these piles.

2.7.2.3 Eye and Hearing Protection--

Because of the possibility of hazardous chemicals or gases, contact lenses should not be used during the inspection. Instead, inspection personnel should use prescription safety glasses with side shields while performing field activities. Splash goggles should be used in addition to the safety glasses whenever there is potential exposure to acid mist and/or liquid chemicals.

Inspectors should use hearing protection whenever required by plant policies and whenever it is difficult to hear another person talking in a normal tone of voice at a distance of 2 ft. To the extent possible, time spent in areas of the plant with high noise levels should be minimized.

2.7.2.4 Electrical Hazards--

The inspector should not use line powered equipment or instrumentation not served by an approved ground fault interrupter. Prior to inspecting any facility, the inspector must ask responsible plant personnel to identify any high voltage cables in the area to be inspected. It is important to find any lines which could be inadvertently touched while walking through the plant.

2.7.2.5 Explosions--

Inspectors should never take battery-powered, portable equipment such as nonexplosion-proof flashlights, etc., into portions of the plant where there are potentially explosive dusts and/or vapors. The equipment can be a source of ignition. Also, smoking materials, including but not limited to matches and lighters, should never be taken into any facility. Many areas of plants visited by inspectors can have explosive dusts and vapors. Finally, the inspection should be terminated immediately whenever a severely vibrating fan is encountered. When a fan disintegrates, shrapnel can be sent over a large area resulting in very serious injuries. Plant personnel should be notified immediately if this problem is detected.

2.7.2.6 Burns--

The areas immediately around hot ducts should be avoided to the extent possible. Also, uninsulated hot roofs should be avoided to the extent possible. In cases where such is required, the proper foot wear must be

worn. When climbing up to potentially hot roofs, gloves should be worn and the roof should not be touched.

2.7.2.7 Inhalation Hazards--

To the extent possible, inspectors should avoid areas which allow the accumulation of airborne pollutants. The appropriate respirators should be selected in accordance with the procedures discussed during safety training provided by the regulatory agency. Furthermore, the respirator must not be worn whenever any condition would prevent a good seal. The most common reason for an improperly fitted respirator is facial hair. The protection factor limits of each respirator must be understood and used only for the specific contaminants listed and only for the concentration range listed. Since monitoring data is rarely available, the inspector must exercise some judgment when selecting the appropriate respirator. Selection of the type of respirator should never be done by smell or taste perception since some of the most toxic pollutants cannot be detected at high concentrations.

Inspectors should use only a self-contained breathing apparatus or an air line respirator when entering areas believed to be oxygen deficient. Each individual using respirator protection must be trained in its proper fitting, use, maintenance, and storage.

The respirator must be inspected before and after each use (disposable respirators excluded). Equipment used only for emergencies will be inspected at least monthly. A record should be kept by date with the results of all inspections. All respirators must be cleaned and disinfected after each use. All filters and cartridges must be replaced whenever necessary. Replacement of other than disposable parts and any repair should be done only by personnel with adequate training and test equipment to ensure the equipment will function properly after the work is accomplished. Only certified parts supplied by the manufacturer for the product being repaired shall be used. The respirators should be stored in atmospheres that will protect them from dust, sunlight, extreme heat or cold, and damaging chemicals.

Individualized eyeglasses mounted to the face piece of full face mask respirators should be used whenever such respirators are necessary for the field duties assigned. Also, contact lenses should not be worn while wearing respirators. Inspectors with perforated ear drums or who have not demonstrated, by means of regular physical examination, that they are capable of withstanding the additional physical stress imposed by respirators, should not wear respirators. Since respirators are necessary for field activities, such individuals should not perform field duties. Finally, inspectors should not chew gum or tobacco while wearing a respirator.

2.7.2.8 Heat Stress--

Each inspector working in moderate and hot climates should drink copious amounts of water and carry drinking water in the vehicle used. The inspection should be interrupted immediately whenever an inspector experiences the symptoms of heat exhaustion including but not limited to fatigue, nausea, vomiting, headache, dizziness, clammy skin, and rapid pulse. The affected individual should rest in a cool place which is not less than 75°F and seek medical care as soon as possible. Continuing the field activities during the onset of

heat exhaustion can lead to heat stroke, a very serious condition requiring immediate medical help. Also, the inspection should be interrupted immediately whenever an inspector experiences heat cramps. The affected individual should find a cool place to rest and drink water containing 0.1% by weight salt (1 teaspoon per 5 quarts of water).

2.7.2.9 Cold Stress--

Field inspectors should avoid portions of the plant exposed to high wind conditions or wet areas when the ambient temperature is low. Clothing for inspections conducted during cold weather must be selected to provide the appropriate degree of protection and to reduce the chances of excessive perspiration accumulation. Clothing should generally be layered to trap heat and to provide the flexibility to adjust to both outside and inside conditions while conducting the inspection. Steel-tipped shoes should not be worn whenever the ambient temperature is low. All shoes worn must be watertight.

2.7.2.10 Skin Absorbable Chemicals--

Inspection personnel should consult published reference materials concerning the selection and use of protective clothing (including gloves) whenever working with or near chemicals which are readily adsorbed by the skin. A partial list of such chemicals is provided in the OSHA Pocket Guide to Occupational Hazards. Inspectors should also exercise extreme caution when sampling liquids containing skin absorbable chemicals. Under no circumstances should the employee allow direct contact between such liquids and the skin (e.g., hands and arms) while acquiring a sample.

2.8 REFERENCES FOR SECTION 2

1. U.S. Environmental Protection Agency. Compilation of Air Pollutant Emission Factors, AP-42, U.S. Environmental Protection Agency, Research Triangle Park, NC. 1988.

2. Segall, R. R., et al. Air Compliance Inspection Manual. EPA-340/1-85-020. U.S. Environmental Protection Agency, Research Triangle Park, NC. September 1985.

3. Cowherd, C., G. E. Muleski, and J. S. Kinsey. Control of Open Fugitive Dust Sources. EPA-450/3-88-008, U.S. Environmental Protection Agency, Research Triangle Park, NC. September 1988.

SECTION 3

PAVED ROADS

Particulate emissions occur whenever a vehicle travels over a paved surface, such as public and industrial roads and parking lots. These emissions may originate from material previously deposited on the travel surface, or resuspension of material from tires and undercarriages. In general, emissions arise primarily from the surface material loading (measured as mass of material per unit area), and that loading is in turn replenished by other sources (e.g., pavement wear, deposition of material from vehicles, deposition from other nearby sources, carryout from surrounding unpaved areas, and litter). EPA's *Compilation of Air Pollutant Emission Factors* (AP-42) indicates that the PM_{10} emission factors for paved roads may be written in the general form:

$$e = A \left(\frac{sL}{B}\right)^{C} \qquad (3\text{-}1)$$

where A, B, and C are constants and

e = PM_{10} emission factor, mass/vehicle/length
s = fractional surface silt content, dimensionless
L = total surface loading, mass/area

The product sL represents the mass of material less than 200 mesh per unit area of the road travel surface and is usually termed the "silt loading."

Selection of the appropriate emission factor model (i.e., the constants A, B, and C) for a given road depends upon:

- The value of the silt loading (sL)
- The average weight of the vehicles traveling on the road

Table 3-1 describes the selection process for paved road emission factors. Note that, for purposes of preparing an emissions inventory, this equation would be applied to each road segment in a facility. A road segment is the distance between two intersections. Figure 3-1 shows an example facility with each road divided into road segments and assigned an arbitrary identification.

TABLE 3-1. SELECTION OF PAVED ROAD EMISSION FACTOR

Silt loading (sL)		Range weight (W)		Applicable PM_{10} emission factor	
g/m^2	oz/yd^2	Mg	Ton	g/VKT[a]	lb/VMT[a]
sL < 2	< 0.06	W > 4	> 4.4	$220\ (sL/12)^{0.3}$[b]	$0.78\ (sL/0.35)^{0.3}$[b]
sL < 2	< 0.06	W < 4	< 4.4	$2.28\ (sL/0.5)^{0.8}$[c]	$0.0081\ (sL/0.015)^{0.8}$[c]
sL > 2[d]	> 0.06	W > 6	> 6.6	$220\ (sL/12)^{0.3}$[b]	$0.78\ (sL/0.35)^{0.3}$[b]
2 < sL < 15	0.06 < sL < 0.44	W < 6	< 6.6	$220\ (sL/12)^{0.3}$[b]	$0.78\ (sL/0.35)^{0.3}$[b]
sL > 15[d]	> 0.44	W < 6	< 6.6	93	0.33

[a]VKT - Vehicle kilometers traveled, VMT = vehicle miles traveled.

[b]Commonly referred to as the "industrial" paved road model.[3]

[c]Commonly referred to as the "urban" paved road model.[3]

[d]For heavily loaded surfaces [i.e., sL > ~ 300 to 400 g/m^2 (9 to 12 oz/yd^2)], it is recommended that the resulting estimate be compared to that from the unpaved road models (Section 4.1.1 of this manual), and the smaller of the two values used.

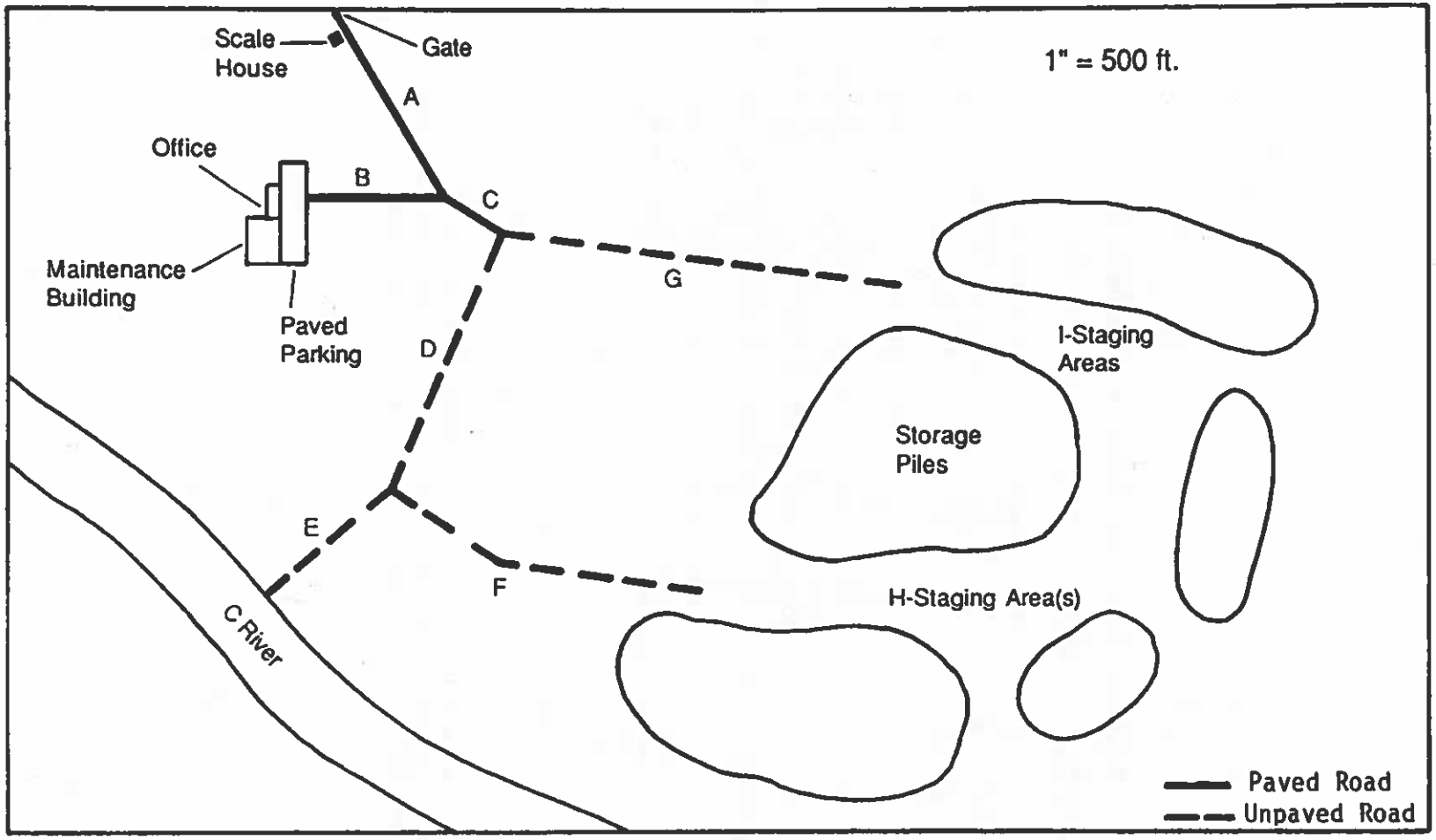


Figure 3-1. Example facility map with roads divided into road segments.

The emission rate is determined by multiplying the emission factor of each road segment by the total vehicle mileage on the segment over the averaging time of interest. Totaling the individual emission rates for each road segment will provide an uncontrolled emission rate for all unpaved roads in the facility.

Surface silt content (s) is the fraction of material smaller than 75 μm in diameter. L is the total dust loading and the product sL represents the mass of silt-size dust particles per unit area of the road surface. As is the case for all predictive models in AP-42, the use of site-specific values of sL is strongly recommended. The silt loading should be determined using the sampling techniques and laboratory analysis procedures described in Appendix F. Figure 3-2 is an example of a sampling data form for paved roads.

Vehicle-related parameters should be obtained using a combination of counting devices, manual or automated records, and information from plant personnel. Pneumatic tube axle counters can be used to obtain traffic volume data. Figure 3-3 shows an example pneumatic traffic log. However, because these counters only record the number of passing axles, it would also be necessary to obtain traffic mix information (e.g., number of axles per vehicle) to convert axle counts to the number of vehicle passes. Vehicle mixes may be observed either visually or by the use of videotape or time-lapse motion pictures. Figure 3-4 shows an example of a manual vehicle log. Comparison of the observed vehicle mix to the pneumatic counter totals allows the accuracy of the axle counter to be assessed.

Paved road emissions can only be controlled in two ways: (a) by reducing the silt loading in Eq. 3-1 and, therefore, reducing the emission factor, and (b) the emission rate may be reduced by limiting the number of vehicles traveling on each road segment. A combination of both techniques could be used. Because it is often impractical to reduce vehicular traffic on a road, most available control techniques either attempt to prevent material from being deposited on the surface or to remove (from the travel lanes) any material that has been deposited.

While the mechanisms of particle deposition and resuspension are largely the same for public and industrial roads, there can be major differences in surface loading characteristics, emission levels, traffic characteristics, and viable control options. For the purpose of estimating particulate emissions and determining control programs, the distinction between public and industrial roads is not a question of ownership but rather a question of surface loading and traffic characteristics.

Although public roads tend to have lower surface loadings than industrial roads, the fact that these roads have far greater traffic volumes may result in a substantial contribution to the measured air quality in certain areas. In addition, many public roads in industrial areas often are heavily loaded and traveled by heavy vehicles. In that instance, better emission estimates would be obtained by treating these roads as industrial roads. In an extreme case, a road or parking lot may have such a high surface loading that the paved surface is essentially covered and is easily mistaken for an unpaved road.

PAVED ROAD SURFACE SAMPLING

Date _____ By _____

Site of Sampling: _____

No. of Traffic Lanes: _____ Type of Pavement: Asphalt/Concrete

Surface Condition: _____

Sample No.	Vac. Bag No.	Time	Location*	Sample Area	Broom Swept? (y/n)

* Use code given on plant map for segment identification and indicate sample location on map.

Figure 3-2. Sampling data form for paved roads.

Pneumatic Traffic Count Log

Facility:_____ Recorded by: _____

Road Segment ID	Counter ID No.	Site Location	Start Count	Date/Time	Stop Count	Date/Time	Axles/Vehicle Mix Observation*	Total No. of Vehicle Passes

* Obtained from the manual traffic log

Figure 3-3. Example pneumatic traffic count log.

VEHICLE LOG

Date _____ Recorded by _____

Road Location: _____

Road Type: _____

Sampling Start Time: _____ Stop Time: _____

Vehicle Type	Axles/Wheels	1	2	3	4	5	6	7	8	9	10	Total
	/											
	/											
	/											
	/											
	/											
	/											

Figure 3-4. Example manual traffic count log.

In that event, use of a paved road emission factor may actually result in a higher estimate than that obtained from the unpaved factor, and the road is better characterized as unpaved in nature rather than paved.[2]

3.1 PUBLIC PAVED ROADS

As discussed above, the term "public" is used in this manual to denote not only ownership of the road but also its surface and traffic characteristics. Roads in this class generally are fairly lightly loaded, are used primarily by light-duty vehicles, and usually have curbs and gutters. Examples are streets in residential and commercial areas and major thoroughfares (including freeways and arterials).

3.1.1 Estimation of Emissions

The emission factor for public paved roads is determined by the decision rule discussed above. Tables 3-2 and 3-3 present a summary of silt loadings as a function of roadway classification and the scheme used to classify roadways, respectively.

In general, roads with a higher traffic volume tend to have lower surface silt loadings. This relationship is expressed in the empirical model presented in Reference 3:

$$sL = 21.3/(V^{0.41}) \qquad (3\text{-}2)$$

where: sL = surface silt loading (g/m^2)
V = average daily traffic volume (vehicles/d)

3.1.2 Demonstrated Control Techniques for Public Paved Roads

Available control methods for public roads are largely designed either to prevent deposition of material on the roadway surface or to remove material which has been deposited in the driving lanes. Measurement-based efficiency values for control methods are presented in Table 3-4. Note that all values in this table are for mitigative measures applied to industrial paved roads.

In terms of public paved road dust control, only very limited field measurement data are available. One reference was found that could be used to indirectly quantify emission reductions and this, too, is for mitigative measures. Estimated PM_{10} control efficiencies (Table 3-5) were developed by applying Eq. 3-1 to measurements before and after road cleaning.[4] Note that these estimates should be considered upper bounds on efficiencies obtained in practice because no redeposition after cleaning is considered. Note also that these estimated emission control efficiencies for urban roads compare fairly well with measurements at industrial roads. No airborne mass emission measurements quantifying control efficiency were found.

TABLE 3-2. SUMMARY OF SILT LOADINGS (sL) FOR PAVED URBAN ROADWAYS[a]

City	Local streets $\bar{X}_g$ (g/m²)	n	Collector streets $\bar{X}_g$ (g/m²)	n	Major streets/ highways $\bar{X}_g$ (g/m²)	n	Freeways/ expressways $\bar{X}_g$ (g/m²)	n
Baltimore	1.42	2	0.72	4	0.39	3	--	--
Buffalo	1.41	5	0.29	2	0.24	4	--	--
Granite City, Ill.	--	--	--	--	0.82	3	--	--
Kansas City	--	--	2.11	4	0.41	13	--	--
St. Louis	--	--	--	--	0.16	3	0.022	1
All	1.41	7	0.92	10	0.36	26	0.022	1

[a] Reference 1. $\bar{X}_g$ = geometric mean based on corresponding n sample size. Dash = not available. To convert g/m² to grains/ft² multiply g/m² by 1.4337.

TABLE 3-3. PAVED URBAN ROADWAY CLASSIFICATION[a]

Roadway category	Average daily traffic (vehicles)	Lanes
Freeways/expressways	> 50,000	≥ 4
Major streets/highways	> 10,000	≥ 4
Collector streets	500-10,000	2[b]
Local streets	< 500	2[c]

[a] Reference 1.

[b] Road width ≥ 32 ft.

[c] Road width ≤ 32 ft.

TABLE 3-4. MEASURED EFFICIENCY VALUES FOR PAVED ROAD CONTROLS[a]

Method	Cited efficiency	Comments
Vacuum sweeping	0-58%	Field emission measurement (PM-15) 12,000-cfm blower[b]
	46%	Reference 5, based on field measurement of 30 μm particulate emissions
Water flushing	69-0.231 V[c,d]	Field measurement of PM-15 emissions[b]
Water flushing followed by sweeping	96-0.263 V[c,d]	Field measurement of PM-15 emissions[b]

[a] Reference 6, except as noted. All results based on measurements of air emissions from industrial paved roads.

[b] PM_{10} control efficiency can be assumed to be the same as that tested.

[c] Water applied at 0.48 gal/yd².

[d] Equation yields efficiency in percent, V = number of vehicle passes since application.

TABLE 3-5. ESTIMATED PM_{10} EMISSION CONTROL EFFICIENCIES[a]

Method	Estimated PM_{10} efficiency, %
Vacuum sweeping	34
Improved vacuum sweeping	37

[a] Reference 4. Estimate based on measured initial and residual $\leq$ 63 μm loadings on urban paved roads and Eq. 3-1. Value reported represents the mean of 13 tests for each method.

In general terms, one would expect that demonstrated control techniques applied to industrial paved roads could also be applied to public roads. One important point to note, however, is that it is generally recognized that mitigative measures decrease in effectiveness as the surface loadings decrease. Because mitigative measures are less effective for public paved roads, the use of preventive measures should be stressed, especially in instances where no dominant or localized source of road loading can be identified. Example sources would include: (1) unpaved areas adjacent to the road; (2) erosion due to storm water runoff; and (3) spillage from passing trucks. Corresponding examples of preventive measures include: (1) installing curbs, paving shoulders, or painting lines near the edge of the pavement; (2) controlling storm water or using vegetation to stabilize surrounding areas; and (3) requiring trucks to be covered and to maintain freeboard (i.e., distance between top of the load and top of truck bed sides). In instances where the source of loading can be easily identified (e.g., salt or sand spread during snow or ice storms) or the effects are localized (e.g., near the entrance to construction sites or unpaved parking lots), either preventive or mitigative measures could be prescribed. Table 3-6 summarizes nonindustrial paved road preventive controls.

There are few efficiency values for any of the preventive measures presented in Table 3-6. Because these materials are designed to prevent deposition of additional material onto the paved surface, quantitative measurements before and after the control are generally not possible and interpretation of results are complicated. For example, based on ambient TSP monitoring results over a 3-month period, immediate and continuous manual cleaning of the access area to a construction site was estimated to result in ~ 30% control.[7] It is unclear, however, what effect seasonal variation in the monitoring data has on the estimate of 30%. Also, because this estimate is based on ambient air concentrations, use of the value may be inconsistent with the other efficiency estimates given in this chapter.

Inspection Procedures for Public Paved Roads. In many respects, public paved roads cannot be considered subject to "field inspections" in the traditional regulatory sense. Silt loadings on these roads are at least partially due to a wide range of ubiquitous sources (such as deposition of ambient dust, application of snow/ice controls, pavement wear, spills, tire/brake wear, litter). It is obvious that those types of sources of silt loadings cannot be routinely inspected. In addition, EPA policy emphasizes preventive rather than mitigative controls for public paved roads. In this way, general reductions in silt loadings in an area would be expected. However, the determination of the effective silt reduction due to a particular preventive control is complicated because of the spatial and temporal separation of the cause and the effect.

Thus, with the exception of "localized" preventive controls employed at industrial and construction sites (such as covering haul trucks or cleaning plant entrance areas), control measures taken to reduce silt loadings on public paved roads cannot be generally inspected.

TABLE 3-6. NONINDUSTRIAL PAVED ROAD DUST SOURCES AND PREVENTIVE CONTROLS

Source of deposit on road	Recommended controls
-- Sanding/salt	-- Make more effective use of abrasives through planning, limited, and uniform spreading, etc. -- Improve the abrasive material through specifications limiting the amount of fines and material hardness, etc. -- Rapid cleanup after streets become clear and dry
-- Spills from haul trucks	-- Require trucks to be covered -- Require freeboard between load and top of hopper -- Wet material being hauled
-- Construction carryout and entrainment	-- Clean vehicles before entering road -- Pave access road near site exit -- Semicontinuous cleanup of exit
-- Vehicle entrainment from unpaved adjacent areas	-- Pave/stabilize portion of unpaved areas nearest to paved road
-- Erosion from storm water washing onto streets	-- Storm water control -- Vegetative stabilization -- Rapid cleanup after event
-- Wind erosion from adjacent areas	-- Wind breaks -- Vegetative stabilization or chemical sealing of ground -- Pave/treat parking areas, driveways, shoulders -- Limit traffic or other use that disturbs soil surface
-- Other	-- Case-by-case determination

Implementation and enforcement of "area-wide" (i.e., not "localized" in the sense described above) preventive measures--such as changes in snow/ice control materials and practices or city ordinances requiring homeowners to remove biological debris from streets in their neighborhoods--will generally require a strong working relationship between the air regulatory agency and other administrative bodies. This relationship is often expressed in a Joint Memorandum of Understanding. Once again, competing demands (e.g., the importance of maintaining traffic safety during ice and snow storms) make "inspection" in the usual sense largely impossible.

Consequently, the inspection procedures for public paved roads will be restricted to the localized preventive controls. These procedures are discussed in connection with industrial road inspections in Section 3.2 of this manual.

3.2 INDUSTRIAL PAVED ROADS

As noted earlier, emission estimation for paved roads depends less upon its ownership and more upon its surface material and traffic characteristics. In this manual, the term "industrial" paved road is used to denote those roads with higher surface loadings and/or are traveled by heavier vehicles. Consequently, some publicly owned roads are better characterized as industrial in terms of emissions. Examples would include city streets in heavily industrialized areas or areas of construction as well as paved roads in industrial complexes.

3.2.1 Estimation of Emissions

When estimating emissions from industrial paved roads, Eq. 3-1 and Table 3-1 should be used. Table 3-7 provides measured silt loading values for a few industries.

3.2.2 Demonstrated Control Techniques for Industrial Paved Roads

As noted in Section 3.1.2, the vast majority of measured control efficiency values for paved roads are based on data from industrial roads. Consequently, the information presented earlier in Table 3-4 is more applicable to this class of road.

Mitigative measures may be more practical for industrial plant roads because (1) the responsible party is known; (2) the roads may be subject to considerable spillage and carryout from unpaved roads; and (3) all affected roads are in relatively close proximity, thus allowing a more efficient use of cleaning equipment. Preventive measures, of course, can be used in conjunction with plant cleaning programs and prevention is probably the preferred approach for city streets in industrialized areas with many potential sources of paved road dust.

TABLE 3-7. INDUSTRIAL PAVED ROAD SILT LOADINGS[a]

Industry	No. of sites	No. of samples	Silt, percent w/w		No. of travel lanes	Silt loading, g/m²	
			Range	Mean		Range	Mean
Copper smelting	1	3	[15.4-21.7]	[19.0]	2	[188-400]	[292]
Iron and steel production	6	20	1.1-35.7	12.5	2	0.09-79	12
Asphalt batching	1	3	[2.6-4.6]	[3.3]	1	[79-193]	[120]
Concrete batching	1	3	[5.2-6.0]	[5.5]	2	[11-12]	[12]
Sand and gravel processing	1	3	[6.4-7.9]	[7.1]	1	[53-95]	[70]

[a] Reference 1. Brackets indicate values based on only one plant vist.

Preventive Measures. These types of control measures prevent the deposition of additional materials on a paved surface area. As a result, it is difficult to estimate their control effectiveness. For mitigative controls, before and after measurement (of surface loadings or of particulate emissions) is possible; clearly, this is not the case for preventive measures. Table 3-6 contains a list of preventive measures along with recommended controls.

Inspection Procedures for Preventive Measures. As mentioned in Section 3.3.1, it is difficult to estimate control effectiveness for preventive measures. Therefore, inspections for this type of control would require a visual inspection. For example, the control plan/operating permit or construction permit (hereafter referred to as plan/permit) may specify that all haul trucks be covered to prevent spills, and all vehicles be cleaned before entering a public paved road to limit carryout. In this instance, the inspector would determine compliance by visually inspecting the haul trucks and the rinsing of vehicles. The inspector should be familiar with all preventive measures specified in the plan/ permit to determine if facility is in compliance.

Mitigative Measures. While preventive measures are to be preferred under the EPA urban dust policy, some sources of road dust loadings may not be easily controlled by prevention. Consequently, some mitigative measures may be necessary to achieve desired goals. This section discusses demonstrated mitigative measures.

Broom Sweeping of Roads. Mechanical street cleaners employ rotary brooms to remove surface materials from roads and parking lots. Much of their effect is cosmetic, in the sense that, while the roadway appears much cleaner, a substantial fraction of the original loading is emitted during the process. Thus, there is some credence to claims that mechanical cleaning is as much a source as a control of particulate emissions.

Measurement-based control efficiency of broom sweeping for industrial roads and estimated efficiencies for urban roads both indicate a maximum (initial) instantaneous control of roughly 25 to 30%. Efficiency, of course, can be expected to decrease after cleanup.

Vacuum Sweeping of Roads. Vacuum sweepers remove material from paved surfaces by entraining particles in a moving air stream. A hopper is used to contain collected material and air exhausts through a filter system in an open loop. A regenerative sweeper functions in much the same way, although the air is continuously recycled. In addition to the vacuum pickup heads, a sweeper may also be equipped with gutter and other brooms to enhance collection. Figure 3-5 shows a vacuum sweeper truck in operation.

Instantaneous control efficiency values were given earlier in Table 3-4. Available data show considerable scatter, ranging from a field measurement showing no effectiveness (over baseline uncontrolled emissions) to another field measurement of 58%. An average of the field measurements would indicate an efficiency of 34%. In addition, the estimated upper limits for PM_{10} control of urban roads (Table 3-5) compare fairly well with that average.

Figure 3-5. Photo of a vacuum street sweeper.

Water Flushing of Roads. Street flushers remove surface materials from roads and parking lots using high pressure water sprays. Some systems supplement the cleaning with broom sweeping after flushing. Note that the purpose of the program is to remove material from the road surface; in some industries, water is regularly applied to roads to directly control emissions (i.e., as in unpaved roads). Unlike the two sweeping methods, flushing faces some obvious drawbacks in terms of water usage, potential water pollution, and the frequent need to return to the water source. However, flushing generally tends to be more effective in controlling particulate emissions.

Equations to estimate instantaneous control efficiency values are given in Table 3-4. Note that water flushing and flushing followed by broom sweeping represent the two most effective control methods (on the basis of field emission measurements) given in that table.

3.3 REGULATORY FORMATS AND ASSOCIATED INSPECTION PROCEDURES

Once a PM_{10} control strategy has been developed and implemented, it becomes necessary for the control agency to ensure that (a) the plan is being carried out as specified, and (b) the plan is achieving the desired level of control. This section discusses methods for determining compliance, along with inspection procedures for paved roads.

3.3.1 "In-plant" Inspection Procedures

Figure 3-6 is an example inspection form which may be completed at the start of the Level II and III inspections by interviewing plant personnel. After determining any changes from the last inspection, a more thorough plant inspection should be performed. "In-plant" inspections for paved roads may consist of one or more of the following items:

1. Observation of control equipment in use.
2. "Spot" checks of pertinent traffic patterns.
3. Surface material sampling.

Each of these items is discussed in more detail below.

The plant inspection of paved road control equipment should focus on the following items:

- Ensuring that operation of the equipment has not changed markedly since the time of the last inspection.
- Examining that the "on-board" pollution control devices (e.g., bags on vacuum street cleaners, water sprays on flushing devices) are performing in an adequate matter. (This evaluation will usually be made on the basis of visible emissions from vents, brooms, etc.)
- Verifying that maintenance items (e.g., replacement nozzles) shown in the facility's records have actually been installed on the control equipment.

Business License Name of Corporation, Company, or Individual Owner or Governmental Agency:

Mailing Address:

Plant Address:

Name and Title of Company Representative:

Telephone Number:

Name of Official Conducting Inspection:

General Questions for Plant Personnel

	Yes*	No	N/A	Comments
1. Have any roads been eliminated or blocked off since last inspection?				
2. Have any roads been paved since last inspection?				
3. Any new roads?				
4. Have traffic volumes or vehicle characteristics on roads changed because of process changes, shutdown, etc.?				
Controls				
5. Have any changes been made in control program since last inspection?				
6. Any new equipment?				
7. Any equipment downtime since last inspection?				

* If any answer is yes, complete comment section.

Figure 3-6. Example inspection form.

- Noting the qualitative performance of the device in removing material from lightly to heavily loaded portions of the roadway.

- Recording the vehicle's odometer (or elapsed usage clock) reading for comparison against last reading and facility records.

In addition to the above items, in-plant inspections of the paved road control equipment may also entail field measurements of silt loadings before and after control. This is discussed in greater detail below.

If the facility personnel indicate marked changes in traffic patterns, traffic volume, etc., or if the control plan calls for vehicle volume reduction (see Section 4.2), the inspector may wish to spot-check traffic parameters at selected roads in the facility. This is accomplished by taking manual traffic mix data. General procedures for manual mix observations are outlined below.

Procedures for Obtaining Manual Traffic Mix Data

Required equipment. Stopwatch, traffic count log (see Figure 3-3)

Procedure:

1. Select unobstructed observation point.

2. Determine distance between two easily defined points (A,B) on the road segment in question.

3. Indicate mix start time.

4. For each passing vehicle, record vehicle type (if known). the number of axles/wheels, and the time in seconds required to travel between points A and B. Alternately, an accumulating stopwatch may be used to determine the average time required to travel between A and B.

5. Record mix stop time.

Finally, the inspector can spot check paved roads by taking material grab samples and comparing either "before and after" silt loadings or comparing the silt loading against some "action level." The latter is useful in assessing prevention of material carryout into public paved roads. As an example, if the silt loading on a public road (with an average traffic volume of 2,000 vehicles per day) adjacent to an industrial or construction site ever exceeds 2.9 g/m^2 (the "action level"), the regulatory agency may require the responsible party to reduce the silt loading to a level less than the action level. The action level is an agency-supplied multiple (3 in this example) of either baseline measurements or the surface silt loading predicted by Eq. 3-1 and should correspond to a minimally acceptable level of control. Figure 3-7 presents a possible format for use with public paved road sources.

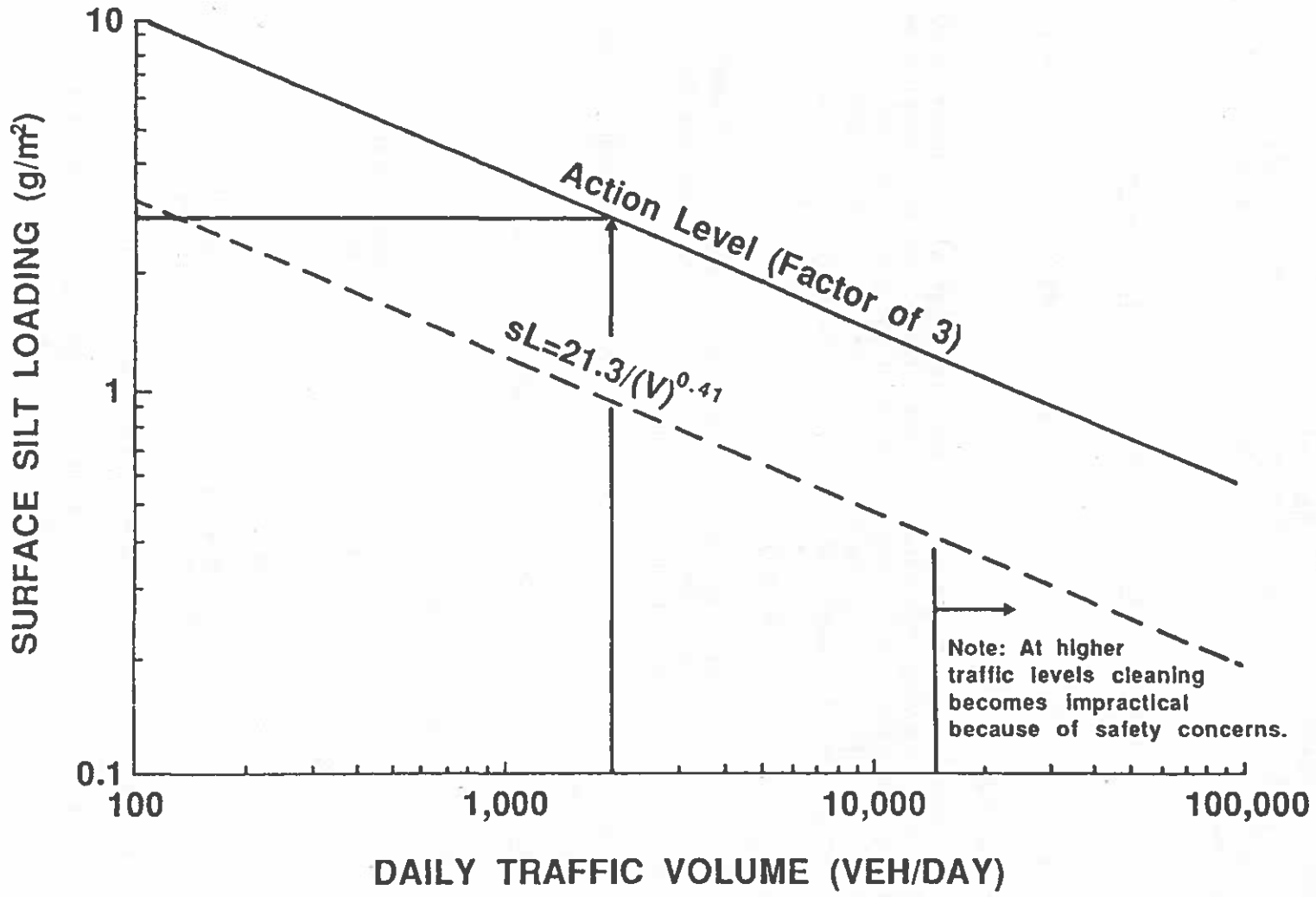


Figure 3-7. Possible use of "action levels" to trigger paved road controls.

The sampling method used to determine silt loading for compliance inspection should conform to the technique used to develop the AP-42 urban paved road equation. That technique is specified in Appendix F and briefly described below.

Procedures for Obtaining Surface Material Samples

Required equipment. Stick-type vacuum, hand broom, dust pan (Figure 3-2)

Procedure (See Appendix F):

1. Arrangements must be made to account for spatial variation of surface silt loading. Possible suggestions include (a) visually determining the heaviest loading on the road and selecting that spot for sampling, (b) sampling the midpoint of the road length segment of interest, and (c) sampling preselected (possibly on the basis of safety considerations) strips on the road surface (note that the samples may be aggregated).

2. After sampling site has been selected, hand sweep with a hand broom and dust pan if there are any large particles in the sampling area. Place sample in jar and label.

3. Vacuum the test site, using preweighed bags. Remove vacuum bag, check for leaks, and label.

4. Analyze for silt content as described in Appendix F.

3.3.2 Plant Record Keeping Requirements

Records must be kept to document the frequency a paved road is vacuumed, flushed, or swept. Pertinent parameters that should be specified in a control plan and regularly recorded include:

General Information to be Specified in the Plan

1. All road segments and parking locations referenced on a map available to both the responsible party and the regulatory agency.

2. Length of each road and area of each parking lot.

3. Type of control applied to each road/area and planned frequency of application

4. Provisions for weather (e.g., program suspended for periods of freezing temperatures; for broom and vacuum sweeping, a predetermined amount of rainfall will be substituted for one treatment).

Specific Records for Each Road Segment/Parking Area Treatment

1. Date of treatment

2. Operator's initials (note that the operator may keep a separate log whose information is transferred to the environmental staff's data sheets)

3. Start and stop times on a particular segment/parking lot, average speed, number of passes

4. Start and stop times for refilling tanks (for water flushing only)

5. Qualitative description of loading before and after treatment

6. Any areas of unusually high loadings, from spills, pavement deterioration, etc.

General Records to be Kept

1. Equipment maintenance records

2. Meteorological log (to the extent that weather influences the control program)

3. Any equipment malfunctions or downtime

Example Compliance Determination--Record Keeping for Flushing of Paved Roads. This example considers the hypothetical facility X with paved roads shown in Figure 3-1. Facility X is located in a PM_{10} nonattainment area and has an approved dust control plan that specifies the following control strategy for paved roads:

1. Flushing at intensities $\geq$ 0.50 gal/yd^2 (2.3 L/m^2)

2. To achieve an average control of 34% by water flushing, no more than 300 vehicle passes can occur between treatments (c.f. Table 3-4). Therefore, the frequency of flushing was determined by traffic volume in the control plan. Because roads A, B, and C have 50, 10, and 40 vehicle passes per working hour, respectively, the roads should be flushed every 6, 30, and 7.5 h of operation. For practical considerations, the permit requires that road B be flushed daily and road C be flushed every 6 h with road A. In addition, paved parking areas should be flushed at the close of each business day.

3. Flushing is to be performed from April 1 through October 31.

4. Each 1/2 in of rainfall (in the previous 24 h) will be substituted for one treatment, and the program will be suspended for days where the morning temperature (8 a.m.) does not exceed 32°F.

Note that the permit also specifies flushing between 11:00 a.m. and 3:00 p.m. when the ambient temperature at 11:00 a.m. is ≥ 40°F for the period from November 1 to March 31.

The source extent parameters for paved surfaces at facility X are given below:

Segment/area	Vehicle passes per hour	Length (ft)	Width (ft)	Approx. area (yd^2)
A	50	650	32	2,300
B	10	350	32	1,250
C	40	200	32	700
Parking	-	300	80	2,700

(Note that the vehicle passes are those used in the equation for determining uncontrolled emissions.) The facility operates a 5,000-gal water truck equipped with auxiliary spray "shoes" for flushing paved surfaces.

Example records kept by facility X to document its flushing program are shown in Figure 3-8 (meteorological data log) and in Figure 3-9 (operator's log). Because the control plan specifies the time interval between each application, the use of the operator's log is the best way to determine compliance. The operator's log should show at least one treatment for every 6 h for roads A and C and one treatment a day for road B. If it does not, the facility should be required to submit a written explanation for the apparent discrepancy. Note that this evaluation may require accumulating scale records over more than one business day, and that it should consider periods of minimal rainfall so as not to confound the check.

Facility X Meteorological Data Log

Month/Year: 06/89 Observer JPM

Day	Obs. Time	Precipitation (in)	Temperature (°F)	Comments
01	8:05	-	64	
02	8:05	-	64	
03				
04				
05	8:10	0.10	78	Rained on Sunday
06	8:10	-	72	
07	8:10	-	73	
08	8:10	0.08	72	
09	8:10	-	77	
10				
11				
12	8:05	3.12	56	No Flushing
13	8:05	-	67	
14	8:05	-	71	
15	8:05	-	74	
16	8:05	-	77	
17				
18				
19	8:05	0.66	64	No Flushing
20	8:05	-	70	
21	8:05	-	74	
22	8:05	0.27	79	
23	8:05	-	79	
24				
25				
26	8:05	T	74	
27	8:05	-	76	
28	8:05	-	76	
29	8:05	-	78	
30	8:05	-	75	
31				

T = Trace

Figure 3-8. Meteorological data log for example facility X.

Facility X Flushing Program--Operator's Log

Date	Segment I.D./Time Treated			
	A	B	C	Parking
6/1	7:30	7:40	7:45	
6/1	1:30	-	1:40	5:30
6/2	7:30	7:40	7:45	
6/2	1:30	-	1:40	5:30
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"
6/12	— NO FLUSHING - JPM			
6/13	7:40	7:50	7:55	
6/13	1.40	-	1:55	5:30
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"
6/19	- NO FLUSHING — JPM			
6/20	7:30	7:40	7:45	
6/20	1:30	—	1:40	5:30

Figure 3-9. Operator's log for example facility X.

3.4 REFERENCES FOR SECTION 3

1. U.S. Environmental Protection Agency. 1985. Compilation of Air Pollution Emission Factors, AP-42. U.S. Environmental Protection Agency, Research Triangle Park, North Carolina.

2. Muleski, G. E. 1987. Update of Fugitive Dust Emission Factors in AP-42 Section 11.2. Final Report, U.S. Environmental Protection Agency, Contract No. 68-02-3891, Work Assignment No. 19.

3. Cowherd, C., Jr., and P. J. Englehart. 1984. Paved Road Particulate Emissions. EPA-600/7-84-077. U.S. Environmental Protection Agency. Washington, D.C.

4. Duncan, M., et al. 1984. Performance Evaluation of an Improved Street Sweeper. EPA Contract No. 68-09-3902.

5. Eckle, T. F., and D. L. Trozzo. 1984. Verification of the Efficiency of a Road-Dust Emission-Reduction Program by Exposure Profile Measurement. Presented at an EPA/AISI Symposium on Iron and Steel Pollution Abatement, Cleveland, Ohio. October 1984.

6. Cowherd, C., Jr., and J. S. Kinsey. 1986. Identification, Assessment and Control of Fugitive Particulate Emissions. EPA-600/8-86-023, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina.

7. Axetell, K., and J. Zeller. 1977. Control of Reentrained Dust from Paved Streets. U.S. Environmental Protection Agency. EPA-907/9-77-007.

SECTION 4

UNPAVED ROADS

As is the case for paved roads, particulate emissions occur whenever a vehicle travels over an unpaved surface. Unlike paved roads, however, the road itself is the source of the emissions rather than any "surface loading." Within the various categories of open dust sources (i.e., paved roads, storage piles, and wind erosion), unpaved travel surfaces have historically accounted for the greatest share of particulate emissions in industrial settings.

Unpaved travel surfaces are found in rural regions throughout the country and in industrial settings. Rural roads may be unpaved because they experience only sporadic traffic and involve considerable road length, making paving generally impractical. Some industrial roads are, by their nature, not suitable for paving. These roads may be used by very heavy vehicles or may be subject to considerable spillage from haul trucks. Other roads may have poorly constructed bases which make paving impractical. Because of the additional maintenance costs associated with a paved road under these service environments, emissions from these roads are usually controlled by regular applications of water and/or chemical dust suppressants.

In addition to roadways, many industries often contain important unpaved travel areas. These areas include travel around stockpiles, staging and reclaim activities. These areas may often account for a substantial fraction of traffic-generated emissions from individual facilities. In addition, these areas tend to be much more difficult to control than stretches of roadway.

4.1 EMISSIONS ESTIMATION

4.1.1 Emission Factor Equation

When considering emissions and their control from unpaved roads, each road must first be divided into road segments. A road segment is the distance between two intersections. Figure 4-1 is a map of an example facility with each road divided into road segments and assigned an arbitrary identification. After identifying each road segment, an emission factor may be determined by applying the following AP-42[1] equation to each road segment:

$$E = 0.61 \left(\frac{s}{12}\right) \left(\frac{S}{48}\right) \left(\frac{W}{2.7}\right)^{0.7} \left(\frac{w}{4}\right)^{0.5} \frac{(365-p)}{365} \text{ (kg/VKT)} \qquad (4\text{-}1)$$

$$E = 2.1 \left(\frac{s}{12}\right) \left(\frac{S}{30}\right) \left(\frac{W}{3}\right)^{0.7} \left(\frac{w}{4}\right)^{0.5} \frac{(365-p)}{365} \text{ (lb/VMT)}$$

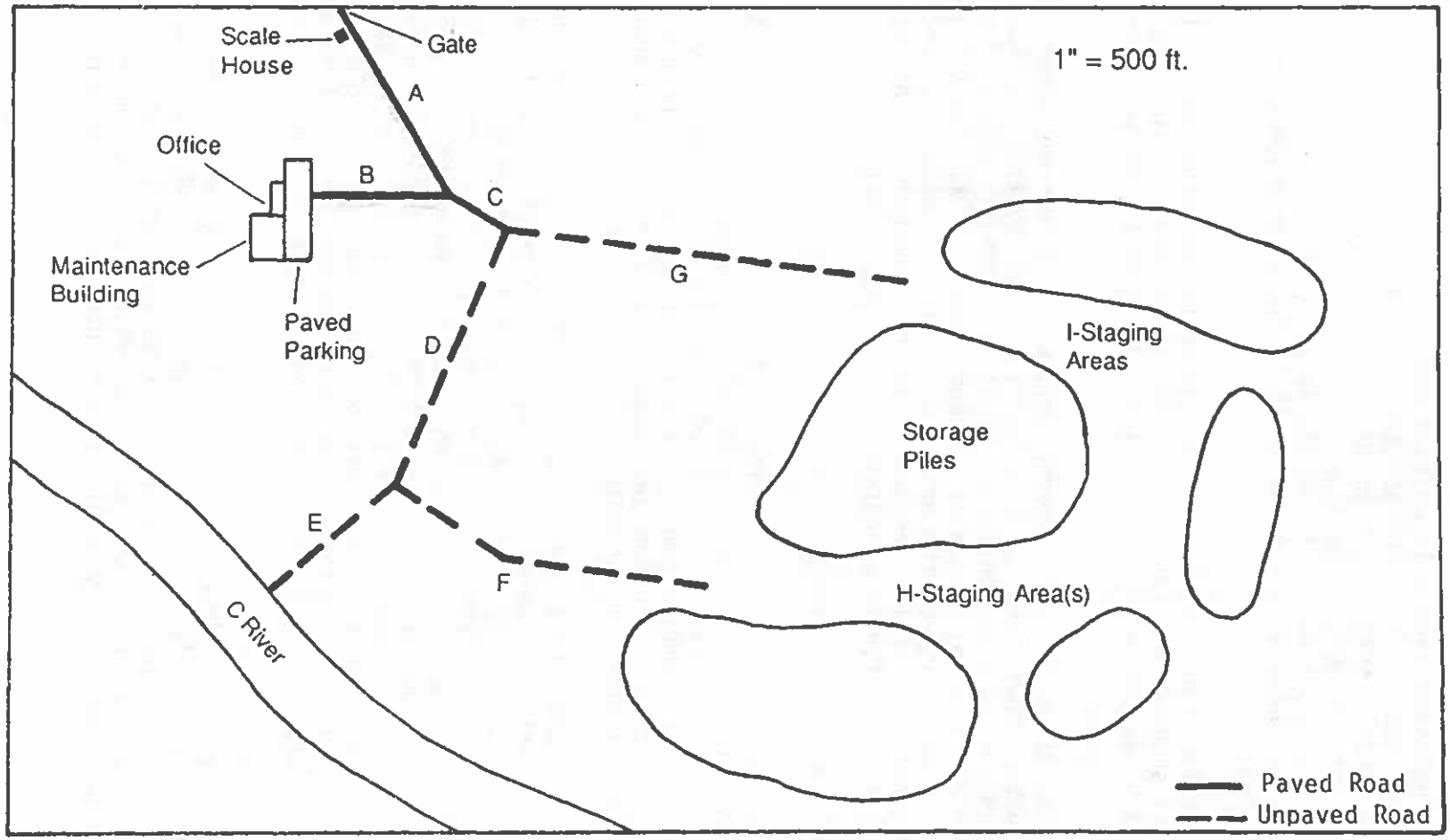


Figure 4-1. Example facility map with roads divided into road segments.

where: E = PM_{10} emission factor in units stated
s = silt content of road surface material, %
S = mean vehicle speed, km/h (mi/h)
W = mean vehicle weight, Mg (ton)
w = mean number of wheels (dimensionless)
p = number of days with $\geq$ 0.254 mm (0.01 in) of precipitation per year

The emission rate is determined by multiplying the emission factor by the length of the road segment and the vehicle passes per day. Adding the emission rate from each segment will provide a total unpaved road emission rate for the facility.

Note that the above emission factor equation represents uncontrolled conditions. (Roads that are controlled will be discussed later in Section 4.3.) Emissions may be controlled by either "add-on" methods (such as watering, etc.) or by reducing the values of parameters in Equation 4-1 (e.g., halving the vehicle speed halves the emission rate). In addition, some compliance tools also make use of the parameters in this equation. Consequently, each parameter in the equation is discussed in more detail below.

4.1.2 Parameters Affecting Emissions

Silt content is the percent of mass which passes a 200 mesh screen (< 75 μmP). Table 4-1 gives a range of measured silt values for unpaved roads in certain industries. As for all AP-42 emission factors, the use of site-specific data is strongly encouraged. The silt content of the road surface material should be determined using the sampling techniques and laboratory analysis procedures described in Appendix F.

Vehicle-related parameters should be obtained using a combination of counting devices, manual or automated records, and information from plant personnel. Pneumatic tube axle counters can be used to obtain traffic volume data. (Note that traffic volume is also necessary to obtain emission rates from Equation 4-1.) Figure 4-2 shows an example pneumatic traffic log. However, because these counters only record the number of passing axles, it would also be necessary to obtain traffic mix information (e.g., number of axles per vehicle) to convert axle counts to the number of vehicle passes. Vehicle mixes may be observed either visually or by the use of videotape or time-lapse motion pictures. Figure 4-3 shows an example of a manual vehicle log.

Additional information obtained from traffic mix observations include fractions of different vehicle types, vehicle speed, and number of wheels per vehicle. A posted plant speed limit may also be used to represent average speed. Finally, comparison of the observed vehicle mix to the pneumatic counter totals allows the accuracy of the axle counter to be assessed.

TABLE 4-1. TYPICAL SILT CONTENT VALUES OF SURFACE MATERIAL ON INDUSTRIAL AND RURAL UNPAVED ROADS[a]

Industry	Road use or surface material	Plant sites	Test samples	Silt, weight percent Range	Silt, weight percent Mean
Copper smelting	Plant road	1	3	15.9-19.1	17.0
Iron and steel production	Plant road	9	20	4.0-16.0	8.0
Sand and gravel processing	Plant road	1	3	4.1-6.0	4.8
Stone quarrying and processing	Plant road	1	5	10.5-15.6	14.1
Taconite mining and processing	Haul road	1	12	3.7-9.7	5.8
	Service road	1	8	2.4-7.1	4.3
Western surface coal mining	Access road	2	2	4.9-5.3	5.1
	Haul road	3	21	2.8-18	8.4
	Scraper road	3	10	7.2-25	17
	Haul road (freshly graded)	2	5	18-29	24
Rural roads	Gravel	1	1	NA	5.0
	Dirt	2	5	5.8-68	28.5
	Crushed limestone	2	8	7.7-13	9.6

Note: NA - Not applicable.

[a] Reference 1 (AP-42).

Pneumatic Traffic Count Log

Facility:_____ Recorded by: _____

Road Segment ID	Counter ID No.	Site Location	Start Count	Date/Time	Stop Count	Date/Time	Axles/Vehicle Mix Observation*	Total No. of Vehicle Passes

* Obtained from the manual traffic log

Figure 4-2. Example pneumatic traffic count log.

VEHICLE LOG

Date _____ Recorded by _____

Road Location: _____

Road Type: _____

Sampling Start Time: _____ Stop Time: _____

Vehicle Type	Axles/Wheels	1	2	3	4	5	6	7	8	9	10	Total
	/											
	/											
	/											
	/											
	/											
	/											
	/											
	/											
	/											
	/											
	/											
	/											
	/											
	/											
	/											

Figure 4-3. Manual traffic count log.

The number of wet days (i.e., precipitation ≥ 0.01 in) per year (p) for the geographical area of interest should be determined from local climatic data. Figure 4-4 gives the geographical distribution of the mean annual number of wet days per year in the United States. Maps giving similar data on a monthly basis are available from the U.S. Department of Commerce.[2]

4.2 EMISSION CONTROL METHODS

As shown in Table 4-2, there are a variety of control options for unpaved travel surfaces. Note that the controls fall into three general categories of: source extent reductions; surface improvements; and surface treatments. Each of these is discussed in greater detail below.

TABLE 4-2. CONTROL TECHNIQUES FOR UNPAVED TRAVEL SURFACES

Source extent reductions:	Speed reduction Traffic reduction
Source improvements:	Paving Gravel surface
Surface treatments:	Watering Chemical stabilization - Asphalt emulsions - Petroleum resins - Acrylic cements - Other

4.2.1 Source Extent Reductions

These controls either limit the amount of traffic on a road to reduce the PM_{10} emission rate, or lower speeds to reduce the emission factor value given by Equation 4-1. Examples could include industrial plant bussing programs for employees, restriction of roads to only certain vehicle types, or strict enforcement of speed limits. In any instance, the control afforded by these measures is readily obtained by the application of the emission factor equation.

4.2.2 Surface Improvements

These controls alter the road surface. Unlike the surface treatments (discussed below), these improvements do not require periodic reapplication.

The most obvious surface improvement is, of course, paving an unpaved road. This option is expensive and is probably most applicable to high volume (i.e., more than a few hundred passes per day) public roads and industrial plant roads that are not subject to very heavy vehicles (e.g., slag pot carriers, haul trucks, etc.) or spillage of material in transport.

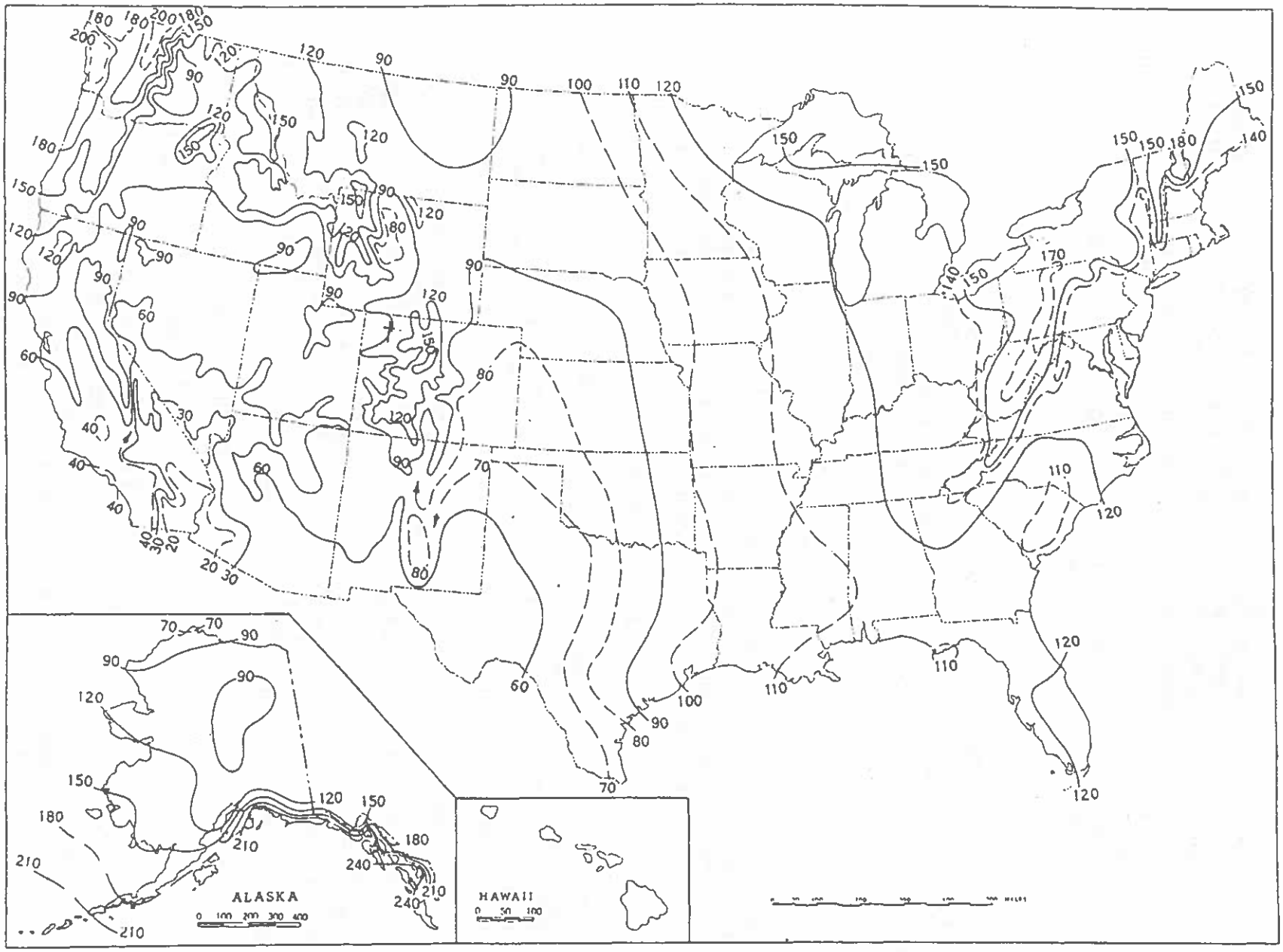


Figure 4-4. Mean annual number of days with at least 0.01 in of precipitation. As noted in Reference 2, patterns are too complex in Hawaii for inclusion on this map. (Means for Hilo, Honolulu, and Lihue are 148,204, and 90 days/yr, respectively.)

Other improvement methods cover the road surface material with another material of lower silt content (e.g., covering a dirt road with gravel or slag, or using a "road carpet" under ballast).[5] Because Equation 4-1 shows a linear relationship between the emission factor and the silt content of the road surface, any reduction in the silt value is accompanied by an equivalent reduction in emissions. This type of improvement is initially much less expensive than paving; however, maintenance (such as grading and spot reapplication of the cover material) may be required.

4.2.3 Surface Treatment

Surface treatment refers to those control techniques which require periodic reapplications. Treatments fall into the two main categories of: (1) wet suppression (i.e., watering, possibly with surfactants or other additives), which keeps the surface wet to control emissions; and (2) chemical stabilization, which attempts to change the physical (and, hence, the emissions) characteristics of the roadway. Necessary reapplication frequencies may range from several minutes for plain water under hot, summer time conditions to several weeks (or months) for chemicals.

Water is usually applied to unpaved roads using a truck with a gravity or pressure feed system. This is only a temporary measure, and periodic reapplications are necessary to achieve any substantial level of control efficiency. Some increase in overall control efficiency is afforded by wetting agents which reduce surface tension. Figure 4-5 shows a typical water truck used to treat unpaved haul roads in a mining operation.

Chemical dust suppressants (Table 4-3), on the other hand, have much less frequent reapplication requirements. These suppressants are designed to alter the roadway surface, such as cementing loose material into a fairly impervious surface (thus simulating a paved surface) or forming a surface which attracts and retains moisture (thus simulating wet suppression).

Chemical dust suppressants are generally applied to the road surface as a water solution of the agent. The degree of control achieved is a direct function of the application intensity (volume of solution per unit area), dilution ratio, and frequency (number of applications per unit time) of the chemical applied to the surface and also depends on the type and number of vehicles using the road.[5] Chemical suppressants have also been proven to be effective as crusting agents for inactive storage piles and for the stabilization of exposed open areas and agricultural fields.[5]

4.3 REGULATORY FORMATS AND ASSOCIATED INSPECTION PROCEDURES

Once a specific PM_{10} control strategy has been developed and implemented, it becomes necessary for the control agency to assure that it is being carried out as specified and is achieving the desired level of control. The control efficiency actually attained by a particular technique depends on the application parameters involved in its implementation. This section will discuss methods for determining compliance, along with inspection procedures, for various surface treatments of unpaved roads.

Figure 4-5. Water truck treating a mine haul road.

TABLE 4-3. CHEMICAL STABILIZERS[a]

A. Type: Bitumens

Product	Manufacturer
AMS 2200, 2300	Arco Mine Sciences
Coherex	Witco Chemical
Docal 1002	Douglas Oil Company
Peneprime	Utah Emulsions
Petro Tac P	Syntech Products Corporation
Resinex	Neyra Industries, Inc.
Retain	Dubois Chemical Company

B. Type: Salts

Product	Manufacturer
Calcium chloride	Allied Chemical Corporation
Dowflake, Liquid Dow	Dow Chemical
DP-10	Wen-Don Corporation
Dust Ban 8806	Nalco Chemical Company
Dustgard	G.S.L. Minerals and Chemicals Corporation
Sodium silicate	The PQ Corporation

C.

Product	Manufacturer
Acrylic DLR-MS	Rohm and Haas Company
Bio Cat 300-1	Applied Natural Systems, Inc.
CPB-12	Wen-Don Corporation
Curasol AK	American Hoechst Corporation
DCL-40A, 1801, 1803	Calgon Corporation
DC-859, 875	Betz Laboratories, Inc.
Dust Ban	Nalco Chemical Company
Flambinder	Flambeau Paper Company
Lignosite	Georgia Pacific Corporation
Norlig A, 12	Reed Lignin, Inc.
Orzan Series	Crown Zellerbach Corporation
Soil Gard	Walsh Chemical

[a] Reference 3, as cited by Reference 4.

4.3.1 General Inspection Procedures and Compliance Information

4.3.1.1 General Inspection Procedures--

Figure 4-6 is an example inspection form which may be completed at the start of the Level II or III inspection by interviewing plant personnel. After determining any changes from the last inspection, a more thorough plant inspection should be performed. "In-plant" inspections for a watering/chemical suppression program may consist of one or more of the following items:

1. Qualitative assessment of the water/chemical truck spray pattern.

2. "Spot" checks of pertinent traffic patterns.

3. Surface material sampling.

Each of these items is discussed in more detail below.

The qualitative evaluation of the water/chemical truck spray pattern should verify that:

1. The spray pattern is roughly uniform over the treated area.

2. The observed application pattern (i.e., one or more passes by the truck), effectively treats the entire travel surface.

If the spray pattern is not uniform, it often produces "ponding" of water/chemical in small areas with little or no water/chemical over other areas of the surface. The practical result is that although the average application intensity (e.g., gal/yd^2) based on calculations appears to provide acceptable levels of control, an erratic spray pattern in reality results in lower control efficiencies. Also, the inspector may want to record the vehicles' odometer reading to compare against the last reading and facility records.

If the facility personnel indicate marked changes in traffic patterns, traffic volume, etc., or if the control plan calls for vehicle volume reduction (see Section 4.2), the inspector may wish to spot-check traffic parameters at selected roads in the facility. This is accomplished by taking manual traffic mix data. General procedures for manual mix observations are outlined in Figure 4-7.

Finally, the inspector can spot-check controlled roads by taking material grab samples and comparing the moisture or silt content with a minimum acceptable value specified in the control plan/operating permit, as applicable. This represents an "indirect" measure of compliance determination as discussed in Section 2. An illustration of this technique to spot-check control efficiency of water and chemical suppressants is presented later in Sections 4.3.2.3 and 4.3.3.3, respectively. Figure 4-7 describes briefly the procedures for collecting material samples. A more complete description can be found in Appendix F.

Business License Name of Corporation, Company, or Individual Owner or Governmental Agency:

Mailing Address:

Plant Address:

Name and Title of Company Representative:

Telephone Number:

Name of Official Conducting Inspection:

General Questions for Plant Personnel

	Yes*	No	N/A	Comments
1. Have any roads been eliminated/blocked off since last inspection?				
2. Have any roads been paved since last inspection?				
3. Any new roads?				
4. Have traffic volumes or vehicle characteristics on roads changed because of process changes, shutdown, etc.?				
Controls				
5. Have any changes been made in control program since last inspection?				
Watering				
6. Any new equipment?				
7. Any equipment downtime since last inspection?				
Chemicals				
8. Any receipts since last inspection?				
9. Any new equipment?				
10. Any equipment downtime?				
11. Have any treated roads been repaired (e.g., bladed, filled in, etc.)?				
12. Any supplemental cleaning (e.g., flushing) since last inspection?				

* If any answer is yes, complete comment section.

Figure 4-6. Example inspection form.

Procedures for Obtaining Manual Traffic Mix Data

Required equipment: Stopwatch, traffic count log (see Figure 4-3)

Procedure:

1. Select unobstructed observation point.
2. Determine distance between two easily defined points (A,B) on the road segment in question.
3. Indicate mix start time.
4. For each passing vehicle, record vehicle type (if known), the number of axles/wheels, and the time in seconds required to travel between points A and B. Alternately, an accumulating stopwatch may be used to determine the average time required to travel between A and B.
5. Record mix stop time.

Procedures for Obtaining Surface Material Samples

Required equipment: Hand (whisk) broom, dustpan

Procedure:

1. Measure the width of the traveled portion of the roadway.
2. Remove the loose surface material from the hard road base with the hand broom and dustpan. The sample should be taken across the entire traveled portion of the road using an 8-in wide sample strip.
3. Place sample in a container and analyze for moisture or silt content as described in Appendix F.

Figure 4-7. Procedures for obtaining manual traffic mix and material samples.

4.3.1.2 Plant Record Keeping Requirements--

Records must be kept that document the date, time, and amount of water/chemical applied to unpaved surfaces. Pertinent parameters that should be specified in a control plan include:

- All road segments and parking locations referenced on a map available to both the responsible party and the regulatory agency (see Figure 4-1 for an example).
- Length of each road and area of each parking lot.

Watering

- Amount of water applied to each road/area and planned frequency of application. (Alternatively, a minimum moisture level could be specified. This is discussed in greater detail later in this section.)
- Any provisions for weather (e.g., 1/4 in of rainfall will be substituted for one treatment; program suspended during freezing periods; watering frequency as a function of temperature, cloud cover, etc.).
- Source of water and tank capacity.

Chemical treatment

- Type of chemical applied to each road/area, dilution ratio, application intensity, and frequency of application.
- Any provisions for weather (e.g., application of chemical dust suppressants during cooler periods of the year may be inadvisable for traffic safety reasons).

4.3.2 Watering

4.3.2.1 Control Efficiency Determination--

The control efficiency of unpaved road watering depends upon: (a) the amount of water applied per unit area of road surface; (b) the time between reapplications; (c) traffic volume during that period; and (d) prevailing meteorological conditions during the period. While several investigations have estimated or studied watering efficiencies, few have specified all the factors listed above.

An empirical model for the performance of watering as a control technique has been developed.[5] The supporting data base consists of 14 tests performed in four states during five different summer and fall months. The model is:

$$C = 100 - \frac{0.8\ p\ d\ t}{i} \qquad (4\text{-}2)$$

where C = average control efficiency, %
p = potential average hourly daytime evaporation rate, mm/h
d = average hourly daytime traffic rate, h^{-1}
i = application intensity, L/m^2
t = time between applications, h

Estimates of the potential average hourly daytime evaporation rate may be obtained from:

$$p = \begin{cases} 0.0049 \times (\text{value in Figure 4-8}) & \text{for annual conditions} \\ 0.0065 \times (\text{value in Figure 4-8}) & \text{for summer conditions} \end{cases}$$

Note that Figure 4-8 does not present data for Alaska and Hawaii. Readers responsible for those portions of the country should consult local meteorological data from local weather stations, state universities, etc.

An alternative approach is presented as Figure 4-9 which shows that between the average uncontrolled moisture content and a value of twice that, a small increase in moisture content results in a large increase in control efficiency. Beyond this point, control efficiency grows slowly with increased moisture content according to the relationship:

$$C = \begin{cases} 75(M-1) & 1 \le M \le 2 \\ 62 + 6.7M & 2 \le M \le 5 \end{cases}$$

where C = instantaneous control efficiency, %
M = ratio of controlled to uncontrolled surface moisture contents

An example using this procedure is illustrated in Section 4.3.2.3.

4.3.2.2 Record Keeping Review--
To determine compliance using record keeping, the facility must maintain records for each road segment/parking area including:

1. Date of treatment.

2. Operator's initials (note that the operator may keep a separate log from which information is transferred to the environmental staff's data sheets).

3. Start and stop times on a particular segment/parking lot, average speed, number of passes.

4. Start and stop times for tank filling.

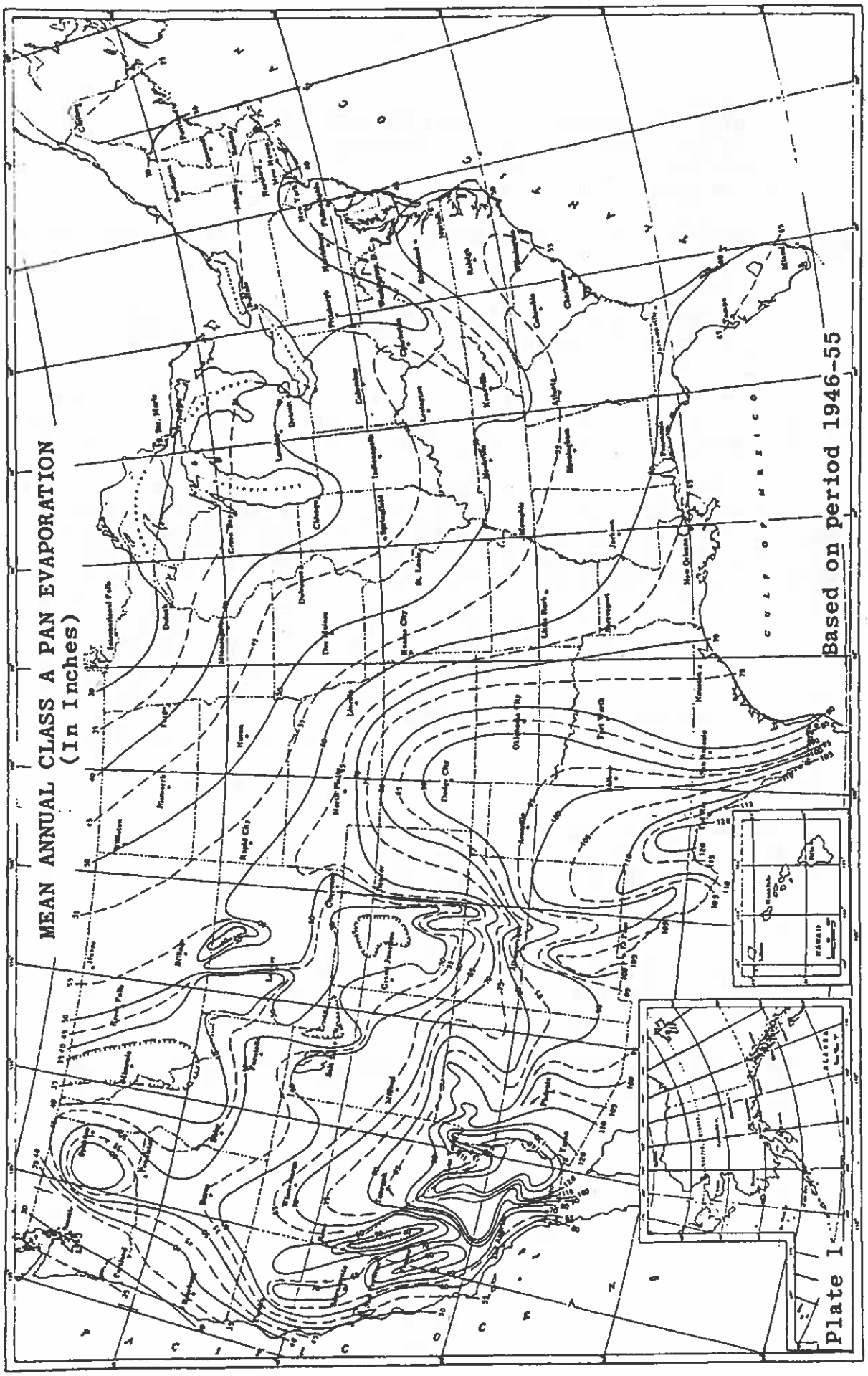


Figure 4-8. Annual evaporation data for the contiguous United States (as diagrammed in the "Climate Atlas of the United States," June 1968).

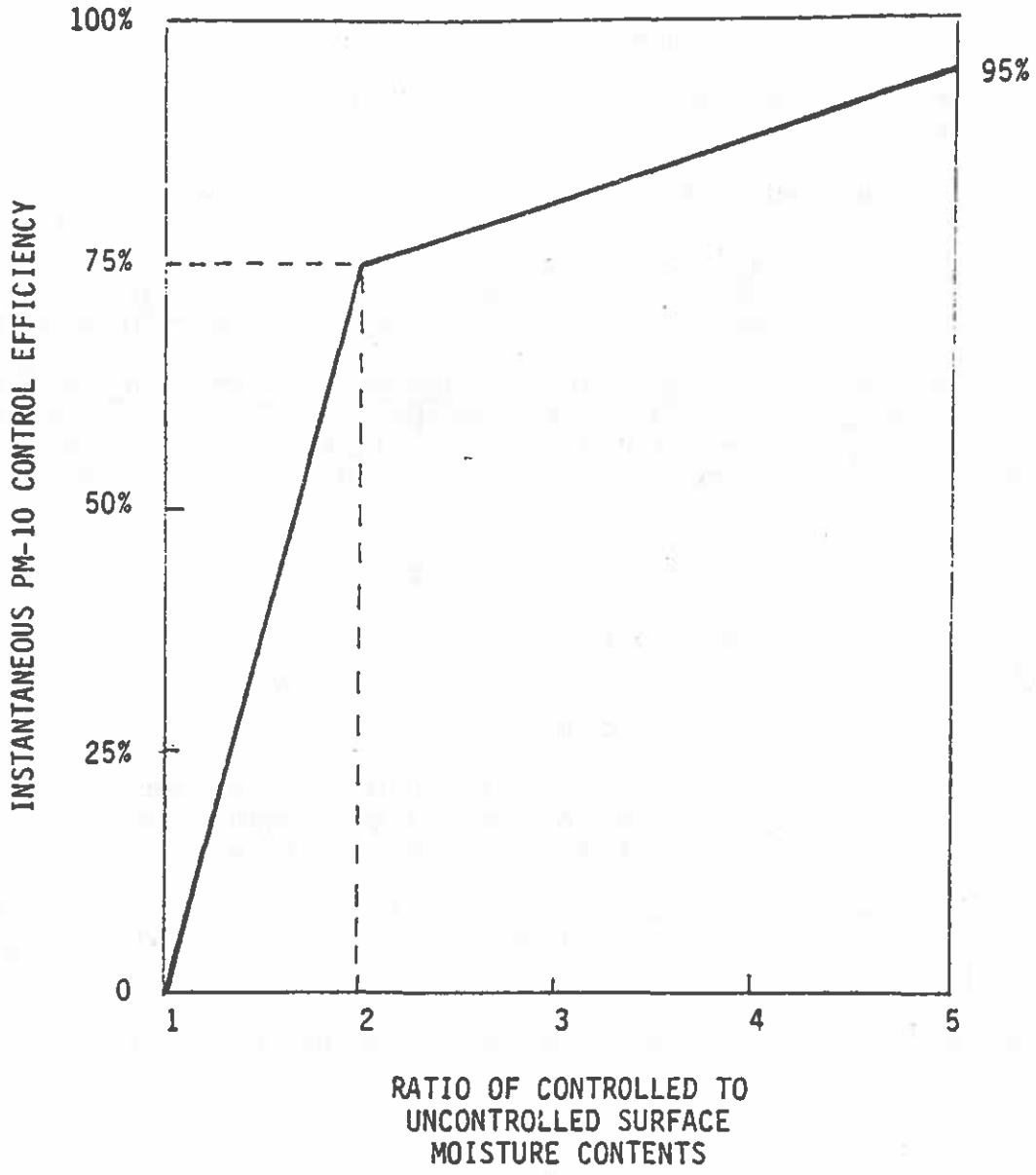


Figure 4-9. Watering control effectiveness for unpaved travel surfaces.

Figure 4-10 is an example form which plant personnel can complete when applying water to unpaved roads. In addition, plant-wide records must be kept including:

1. Equipment maintenance records.

2. Meteorological log (to the extent that weather influences the control program).

3. Any equipment malfunctions or downtime.

The procedures described above allow an inspector to review historical data to determine compliance. A procedure is described below which provides an independent assessment of dust control while the inspector is on-site.

Example Compliance Determination--Record Keeping for a Watering Program. This example considers the hypothetical facility X with unpaved roads and staging areas shown in Figure 4-1. Facility X is located in a PM_{10} nonattainment area and has an approved dust control plan that specifies the following conditions:

1. Application intensity ≥ 0.20 gal/yd² (0.91 L/m²).

2. Application frequency of twice/10-h workday.

3. Watering according to the application parameters is to be performed from April 1 through October 31.

4. Each ¼ in of rainfall (in the previous 24 h) will be substituted for one treatment, and the program will be suspended for days where the morning temperature (8 a.m.) does not exceed 32°F.

Note that the permit also specifies watering between 11:00 a.m. and 3:00 p.m. when the ambient temperature at 11:00 a.m. is ≥ 40°F for the period from November 1 to March 31.

The source extent parameters for unpaved surfaces at facility X are given below:

Segment/area	Length (ft)	Width (ft)	Approx. area (yd²)	Vehicle passes per hour	Vehicle speed (mph)
D	800	40	3,600	40	10
E	500	25	1,400	1	5
F	1,000	40	4,500	40	10
G	1,200	40	5,300	40	10
H (staging area)	-	--	10,000	40	5
I (staging area)	-	--	17,000	40	5

WATER APPLICATION LOG

Date	Time	Application intensity (gal/yd^2)	Area(s) treated	Climatic parameters: Amb. temp. (°F)	Climatic parameters: Date/amt. of last rainfall	Equipment used	Operator initials	Comments

Figure 4-10. Example water application log.

The facility operates a 5,000-gal water truck equipped with a 10-ft spray bar. Visual observation indicates that two water truck passes (i.e., one in each direction) effectively treats the travel surface of the unpaved roads. Five to six passes are required to cover the travel portions of the staging areas (H and I).

Example records kept by facility X to document its watering program are shown in Figure 4-11 (meteorological data log), and in Figure 4-12 (operator's log). The inspector responsible for the facility would, in practice, compare these two records for compliance with permit conditions. The check is intended to verify that all the unpaved roads and staging areas have been treated twice daily (except after significant rainfall or under freezing conditions). Note in Figure 4-12 that only one treatment is logged for 6/22 as 0.27 in of rainfall was recorded for the previous 24-h period.

If it is suspected that the documentation is inaccurate, for example, treatments are logged for periods where no water was applied, the operator's log can be cross-checked against any facility records kept for maintenance/service of the water truck. These records are typically more complete than those for the watering program. If the two sets of records do not match, the facility should be required to submit a written explanation for the apparent discrepancy.

Information compiled in the operator's log represents critical data against which operations observed during Level II and III inspections should be evaluated. For example, Figure 4-12 provides a basis for estimating the typical length of time for a typical "cycle"--the time required to complete a single application to all facility unpaved surfaces. For facility X, this cycle length is on the order of 2 h. In practice, if cycles observed during an inspection deviated considerably from those indicated in the operator's log, the inspector should require the facility to explain the reasons for the deviation.

In a similar fashion, while the operator's log does not allow the inspector to directly determine application intensity--the amount of water applied per unit surface area--a check of filling times during inspection does provide a qualitative indicator of whether or not the facility is, in fact, complying with its permit requirements. In the case of facility X, a typical filling time is on the order of 10 to 15 min. In practice, if the inspector can approximate the filling rate (from a knowledge of pump specifications), it is fairly easy to determine whether application intensities suggested by the log information meet permit requirements.

This procedure can be illustrated for facility X as follows:

1. The pattern of applications indicated in the operator's log--

   E (1 pass)/F (2 passes)/and complete application to staging area I--corresponds to 22,200 yd^2.

Facility X Meteorological Data Log

Month/Year: 06/89 Observer JPM

Day	Obs. Time	Precipitation (in)	Temperature (°F)	Comments
01	8:05	-	64	
02	8:05	-	64	
03				
04				
05	8:10	0.10	78	Rained on Sunday
06	8:10	-	72	
07	8:10	-	73	
08	8:10	0.08	72	
09	8:10	-	77	
10				
11				
12	8:05	3.12	56	Rained Sat & Sun, Roads Muddy
13	8:05	-	67	Roads still visibly wet (puddles)
14	8:05	-	71	Roads dry enough to water
15	8:05	-	74	
16	8:05	-	77	
17				
18				
19	8:05	0.66	64	Roads wet -- No watering
20	8:05	-	70	
21	8:05	-	74	
22	8:05	0.27	79	Skip morning application
23	8:05	-	79	
24				
25				
26	8:05	T	74	
27	8:05	-	76	
28	8:05	-	76	
29	8:05	-	78	
30	8:05	-	75	
31				

T = Trace

Figure 4-11. Meteorological data log for example facility X.

Facility X Water Control Program--Operator's Log

Date	Tank Fill Time Start	Tank Fill Time Stop	Road Segments/Areas Treated Start	Road Segments/Areas Treated	Road Segments/Areas Treated Stop	Comments	Op. Initials
6/01	8:45	8:55	9:00	E(1 pass)/F(2)/I(complete)	9:35		JPM
6/01	9:45	10:00	10:00	D(2)/G(2)/H(complete)/E(1)	10:45		JPM
6/01	1:05	1:20	1:20	D(2)/G(2)/H(complete)/E(1)	2:00		JPM
6/01	2:05	2:15	2:15	E(1)/F(2)/I(complete)	3:00		JPM
6/05	8:15	8:30	8:30	E(1)/F(2)/I complete	9:10		JPM
6/05	9:20	9:30	9:30	D(2)/G(2)/H complete/E(1)	10:15		JPM
6/05	1:00	1:15	1:20	D(2)/G(2)/H complete/E(1)	2:00		JPM
6/05	2:05	2:20	2:20	E(1)/F(2)/I complete	3:00		JPM
6/22	1:00	1:15	1:20	E(1)/F(2)/I(complete)	2:00		JPM
6/22	2:05	2:15	2:15	D(2)/G(2)/H(complete)/E(1)	3:00		JPM

Figure 4-12. Operator's log for example facility X.

2. Thus the minimum application intensity of 0.20 gal/yd² requires 4,440 gal (22,200 yd² x 0.20 gal/yd² = 4,440 gal).

3. Given a 10-min filling time, this corresponds to a fill rate of about 400 gal/min.

During an inspection, the inspector for facility X would verify the length of time required to completely fill the tank from an initial near-empty state. Because the application cycle cited above (one-half of the total cycle) requires nearly the entire tank capacity, it follows that if the tank is not at least 90% full after a typical fill time, then it is likely that facility X is not watering at the required application intensities.

4.3.2.3 "In-Plant" Inspection Procedures

An "in-plant" inspection to determine compliance with fugitive dust rules or permit conditions for unpaved roads involves focusing on several items including:

- A visual inspection of the facility in order to observe that all unpaved roads listed in the state permit/control plan still exist and whether additional roads have been developed.

- An examination of the source's records (as described above) documenting frequency of water application, amount applied, area(s) watered, etc.

- Observations of any spraying operations undertaken by the source during the inspector's visit.

After becoming familiar with the plant facilities and the control plan, the inspector should request that plant personnel provide the information that will allow the inspector to complete the example work sheet shown in Figure 4-6. The inspector would conduct a full inspection of the facility in order to obtain and verify actual operating conditions.

The inspector should spot-check the controlled roads by taking either traffic counts or material grab samples from the road(s). The moisture or silt content of the traveled portion of the roadway may be compared against a minimum acceptable value specified in the control plan/operating permit to determine compliance. This is considered to be an indirect method of compliance determination as discussed in Section 2. For example, the control plan/operating permit may specify that the control efficiency can never be below 75% or the average instantaneous control efficiency must not be below 85%. If the latter is specified, more samples would be required because the instantaneous efficiency must be tracked over time.

To illustrate, assume that a facility waters unpaved road D (Figure 4-1) every 3 h to control fugitive emissions. A field estimate of the control efficiency can be determined by the following steps:

1. Determine the uncontrolled moisture content by sampling prior to the first control of the day and having the facility not water a small portion of the road. Then collect a sample and determine moisture content using the procedures found in Appendix F. The uncontrolled moisture content needs only to be collected once. In this example, the uncontrolled moisture is assumed equal to 1.5%.

2. Assume the facility waters road D (Figure 4-1) at noon and again at 3 p.m. A moisture sample should be taken right after water was applied, at 1 p.m., 2 p.m., and again right before reapplication at 3 p.m.

3. Each sample should be analyzed for moisture content as quickly as practical, again following the procedures found in Appendix F.

4. Next, the control efficiency can be determined by calculating the controlled to uncontrolled ratio and using Figure 4-9. Assume the following moistures from the four samples were:

Sample no.	Time	Moisture content (%)
1D	Noon	6.75
2D	1 p.m.	6.00
3D	2 p.m.	5.25
4D	3 p.m.	3.75

Therefore, the moisture content ratios and associated control efficiency values are:

Sample No.	Ratio	Control (%)
1D	6.75/1.5=4.5	92
2D	4.0	89
3D	3.5	85
4D	2.5	79
	Average	86

The instantaneous control efficiencies for this example are shown on Figure 4-13. Note that for this example, this facility would be in compliance with both a minimum of the 75% instantaneous or 85% average control limits.

4.3.3 Chemical Treatments

4.3.3.1 Determination of Control Efficiency--

As noted in Section 4.2, some chemicals (most notably salts) simulate wet suppression by attracting and retaining moisture on the road surface. These methods are often supplemented by some watering. In these cases it is

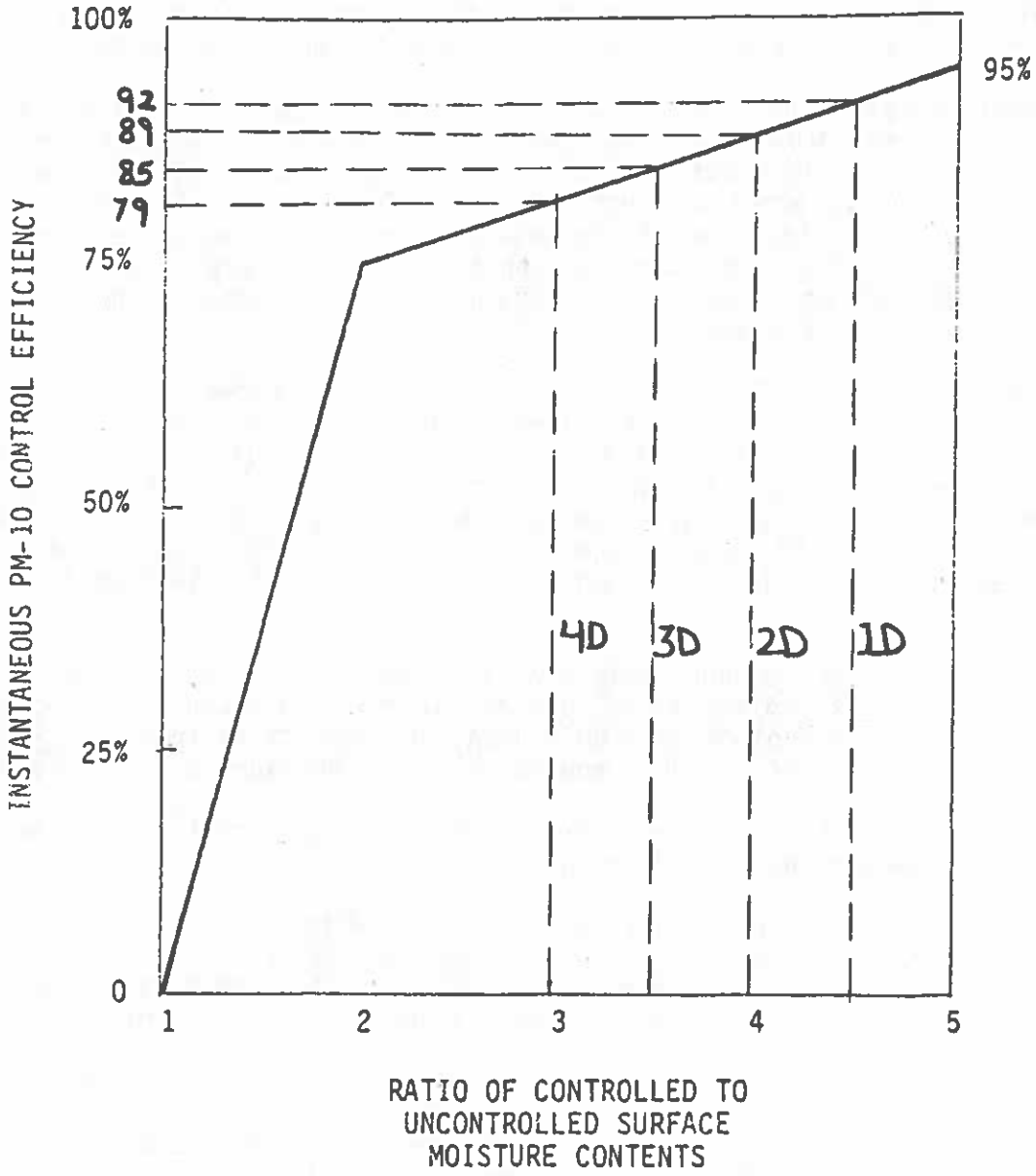


Figure 4-13. Watering control effectiveness for unpaved road D in example problem.

recommended that control efficiency estimates be obtained using Figure 4-9 and enforcement be based on the grab sample moisture content technique described above in Section 4.3.2.3.

The more commonly used chemical dust suppressants form a hard cemented surface. It is this type of suppressant that is considered below.

Besides water, petroleum resins (such as Coherex) have historically been the products most widely used and evaluated. However, considerable interest has been shown in alternative chemical dust suppressants. These have included asphalt emulsions, acrylics, and adhesives. In addition, "generic" petroleum resin formulations (designed to be produced on-site) have gained considerable attention. On-site production of this type of suppressant in quantities commonly used at iron and steel plants has been estimated to reduce chemical costs by approximately 50%.[6]

In an earlier test report, average performance curves were generated for four chemical dust suppressants commonly used in the iron and steel industry: (a) a commercially available petroleum resin; (b) a generic petroleum resin for on-site production at an industrial facility; (c) an acrylic cement; and (d) an asphalt emulsion.[7] The results of this program were combined with other test results to develop a model to estimate time-averaged PM_{10} control performance. This model is illustrated as Figure 4-14. Several items are to be noted:

- The term "ground inventory" is a measure of residual effects from previous applications. Ground inventory is found by adding together the total volume (per unit area) of concentrate (not solution) since the start of the dust control season. An example is provided below.

- Note that no credit for control is assigned until the ground inventory exceeds 0.05 gal/yd^2.

- Because suppressants must be periodically reapplied to unpaved roads, use of the time-averaged values given in the figure are appropriate. Recommended minimum reapplication frequencies (as well as alternatives) are discussed later in this section.

- Figure 4-14 represents an average of the four suppressants given above. The basis of the methodology lies in a similar model for petroleum resins only.[7] However, agreement between the control efficiency estimates given by Figure 4-14 and available field measurements is reasonably good.

4.3.3.2 Record Keeping Review--

After becoming familiar with the plant facilities and the control plan, the inspector should request that plant personnel provide the information that will allow the inspector to complete the example inspection form shown in Figure 4-6. The inspector would conduct a full inspection of the facility in order to obtain and verify actual operating conditions. Specific records for each road segment/parking area should include:

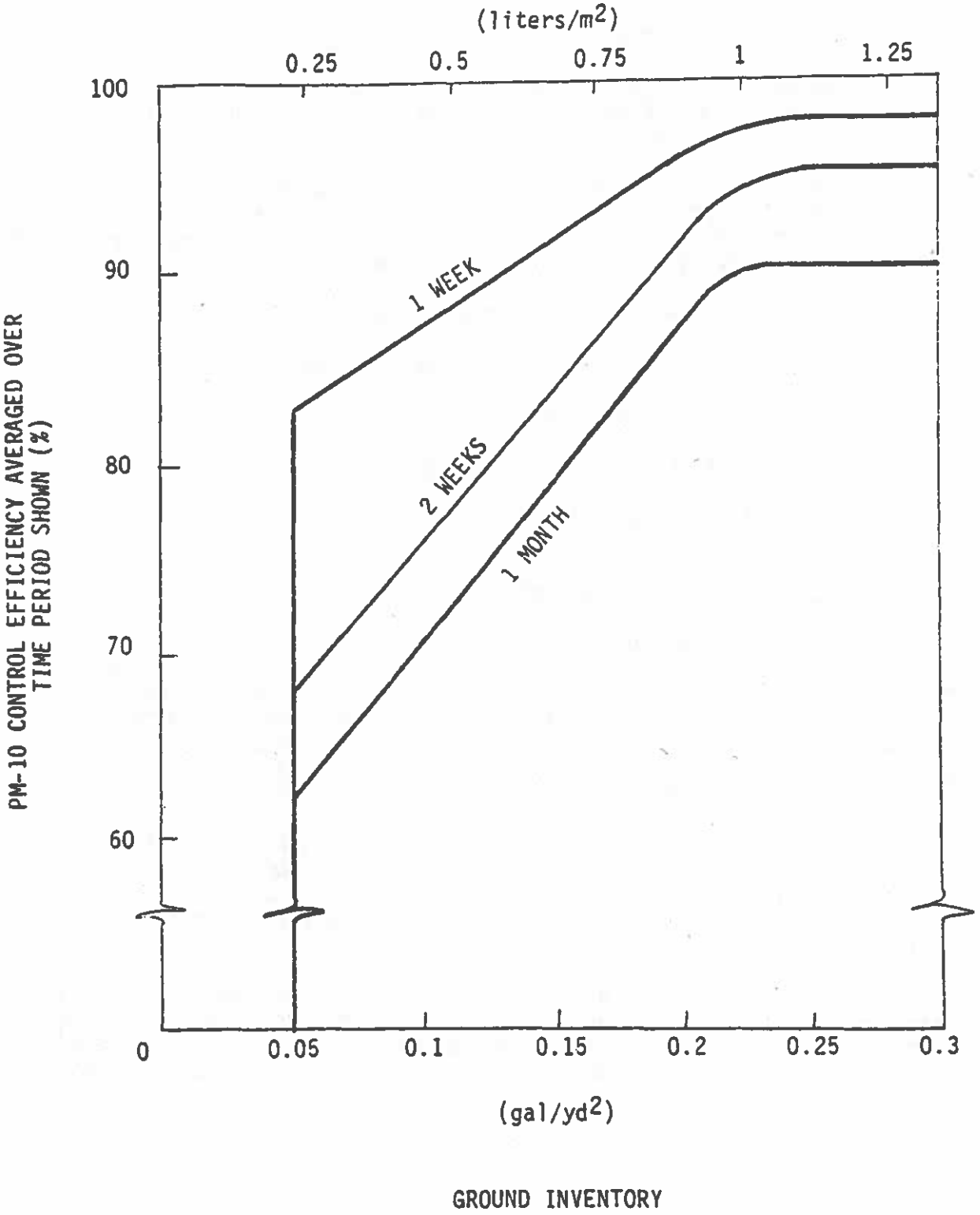


Figure 4-14. Average PM_{10} control efficiency for chemical suppressants.

1. Date of treatment.

2. Operator's initials (note that the operator may keep a separate log of whose information is transferred to the environmental staff's data sheets).

3. Start and stop times on a particular segment/parking lot, average speed, number of passes, amount of solution applied, and dilution. Figure 4-15 is a typical form which plant personnel can complete when applying chemical dust suppressants to unpaved roads.

4. Qualitative description of road surface condition.

In addition, plant-wide records must be kept including:

1. Equipment maintenance records.

2. Suppressant delivery record. Figure 4-16 is an example.

3. Meteorological log (to the extent that weather influences the control program).

4. Any equipment malfunctions or downtime.

These plant-wide records provide the inspector with the information necessary to cross-check the records kept for individual road segments. For example, the start/stop inventories and suppressant delivery record should be compared to the final ground inventory values over all roads at the facility. Also, application records should be checked against the meteorological and equipment maintenance/downtime records. The inspector should request plant personnel to explain any discrepancies.

Another form which can be used as part of record keeping review of chemical control programs is presented in Figure 4-17. A completed form containing typical data is shown in Figure 4-18. The following is an example using the information in Figure 4-16 as applied to the determination of monthly average control efficiency using Figure 4-14 above.

Suppose that Equation 4-1 has been used to estimate a PM_{10} emission factor of 2.0 kg/VKT. Further, suppose that starting on May 1, the road is treated with 0.25 gal/yd^2 of a (1 part chemical to 5 parts water) solution on the first of each month until October. In this instance, the following average controlled emission factors are found:

Date	Time	delivered	delivered	agent	Facility destination[a]	Comments

[a] Denote whether suppressant will be applied immediately upon receipt or placed in storage.

Figure 4-15. Typical form for recording delivery of chemical dust suppressants.

Date	Time	Type of chemical	Dilution ratio	Application intensity, gal/yd^2	Area(s) treated	Equipment used	Operator initials	Comments

Figure 4-16. Typical form for recording chemical dust suppressant control parameters.

CHEMICAL SUPPRESSANT APPLICATION LOG AND WORKSHEET

Site Description _____

Treatment No.	Date	Application Intensity (gal/yd^2)	Dillution Ratio (water:chem)	Ground Inventory (gal/yd^2)	Period (days)	Average PM-10 Control (%)

Figure 4-17. Example chemical suppressant application log.

CHEMICAL SUPPRESSANT APPLICATION LOG AND WORKSHEET

Site Description _____

Treatment No.	Date	Application Intensity (gal/yd^2)	Dilution Ratio (water:chem)	Ground Inventory (gal/yd^2)	Period (days)	Average PM-10 Control (%)
1	5/1	0.25	5:1	0.042	31	0
2	6/1	0.25	5:1	0.083	30	68
3	7/1	0.25	5:1	0.125	31	75
4	8/1	0.25	5:1	0.167	31	82
5	9/1	0.25	5:1	0.208	30	88

Figure 4-18. Example completed log.

Period	Ground inventory (gal/yd²)	Average control efficiency (%)[a]	Average controlled emission factor (kg/VKT)
May	0.042[b]	0	2.0
June	0.083	68	0.64
July	0.12	75	0.50
August	0.17	82	0.36
September	0.21	88	0.24

[a] From Figure 4-14; zero efficiency assigned if ground inventory is less than 0.05 gal/yd².

[b] 0.25 gal/yd² x 1/6 = 0.042.

Additional topics must also be considered when inspecting roads controlled by chemical dust suppressants. These are briefly discussed below.

* Use of paved road controls on chemically treated unpaved roads. Repeated use of certain chemical dust suppressants tend, over time, to form fairly impervious surfaces on unpaved roads. The resulting surface may allow the use of paved road cleaning techniques (such as flushing, sweeping, etc.) to reduce aggregate loading due to spillage and track-on. A field program conducted tests on surfaces that had been flushed and vacuumed 3 d earlier.[7] (The surfaces themselves had last been chemically treated 70 d before.) Control efficiency values of 90% or more (based on the uncontrolled emission factor of the unpaved roads) were found for each particulate size fraction considered.

The use of paved road techniques for "housekeeping" purposes would appear to have the benefits of both high control (referenced to an uncontrolled unpaved road) and potentially relatively low cost (compared to follow-up chemical applications). Generally, it is recommended that these methods not be employed until the ground inventory exceeds approximately 0.2 gal/yd² (0.9 L/m²) and the paved controls be tested on a small portion of the chemically treated road prior to full-scale implementation.

* Minimum reapplication frequency. Because unpaved roads in industry are often used for the movement of materials and are often surrounded by additional unpaved travel areas, spillage and carryout onto the chemically treated road require periodic "housekeeping" activities. In addition, gradual abrasion of the treated surface by traffic will result in loose material on the surface which should be controlled.

It is recommended that at least dilute reapplications be employed every month to control loose surface material unless paved road control techniques are used (as described above). More frequent reapplications would be required if spillage and track-on pose particular problems for a road.

* Weather considerations. Roads generally have higher moisture contents during cooler periods due to decreased evaporation. Small increases in surface moisture may result in large increases in control efficiency (as referenced to the dry summertime conditions inherent in the AP-42 unpaved road predictive equation).[6] In addition, application of chemical dust suppressants during cooler periods of the year may be inadvisable for traffic safety reasons.

4.3.3.3 "In-Plant" Inspection Procedures for Chemical Treatment--

While record keeping affords a convenient method of assessing long-term control performance, it is important that regulatory personnel have "spot-check" compliance tools at their disposal (i.e., a hand broom and dustpan). The inspector should broom sweep a portion of the road and determine silt loading as described in Appendix F. The industrial paved road equation (Equation 3-1) will conservatively overestimate controlled emissions:

$$\text{Control efficiency (\%)} \geq \left\{ \frac{[\text{Result from Equation 4-1 for p=0}] - [\text{Result from Equation 3-1}]}{\text{Result from Equation 4-1 for p=0}} \right\} \times 100\%$$

Note that this compliance tool (unlike others in this section) requires the inspector to obtain the all-information necessary to estimate the two emission factors (i.e., Equations 3-1 and 4-1).

4.4 REFERENCES FOR SECTION 4

1. Environmental Protection Agency. Compilation of Air Pollution Emission Factors (AP-42). Research Triangle Park, North Carolina. September 1985.

2. Climatic Atlas of the United States. U.S. Department of Commerce, Washington, D.C. June 1968.

3. Rosbury, K. D. 1984. Fugitive Dust Control Techniques at Hazardous Waste Sites. Interim Technical Report No. 1--Proposed Field Sampling Plan, Contract No. 68-02-3512, WA 61, U.S. Environmental Protection Agency, Municipal Environmental Research Laboratory, Cincinnati, Ohio. March 1984.

4. Turner, J. H., et al. 1984. Fugitive Particulate Emissions From Hazardous Waste Sites. Prepared for the U.S. Environmental Protection Agency, Cincinnati, Ohio. September 1984.

5. Cowherd, C., Jr., and J. S. Kinsey. 1986. Identification, Assessment and Control of Fugitive Particulate Emissions. EPA-600/8-86-023, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina.

6. Russell, D., and S. C. Caruso. 1984. The Relative Effectiveness of a Dust Suppressant for Use on Unpaved Roads Within the Iron and Steel Industry. Presented at EPA/AISI Symposium on Iron and Steel Pollution Abatement, Cleveland, Ohio. October 1984.

7. Muleski, G. E., and C. Cowherd, Jr. Evaluation of the Effectiveness of Chemical Dust Suppressants on Unpaved Roads. EPA-600/2-87-102, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. November 1987.

8. Muleski, G. E., T. Cuscino, Jr., and C. Cowherd, Jr. 1984. Extended Evaluation of Unpaved Road Dust Suppressants in the Iron and Steel Industry. EPA-600/2-84-027, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. February 1984.1

SECTION 5

STORAGE PILES

Particulate emissions from aggregate storage piles occur whenever the material is disturbed, relocated, or subjected to wind speeds above the material-specific erosion threshold value. The quantity of emissions released from storage pile activity is dependent on the amount of material involved, its moisture content, silt content, and friability. Emissions are also affected by the material load-in, load-out, and maintenance techniques and by the characteristics of vehicles traveling on and around the storage pile area.

Storage piles are found in most operations that use minerals in aggregate form. Materials can be transferred to and from storage piles by a variety of techniques which can include fixed stacker-reclaimer systems, front end-loaders, scrapers, and other types of mobile equipment. Storage piles are usually left exposed to the ambient winds because of the costs associated with enclosing them and because of the impediment that enclosures cause to the usual requirement for frequent material transfer.

There are two generally recognized mechanisms responsible for the direct generation of dust emissions from storage pile operations. They include:

- Materials handling operations, and
- Wind erosion.

In addition, if vehicular traffic is required for stockpiling activities, vehicles can often be the predominant source of PM_{10} emissions from the area. The traffic-related sources can be assessed, controlled and inspected as discussed in detail in Section 4.

Particulate emissions from the two direct storage pile sources (i.e., materials handling and wind erosion) can be controlled by one of three general methods. These include: containments to physically shelter the pile from ambient winds; surface treatments to agglomerate exposed particulate; and source extent control to reduce the amount of material handled and to enhance natural crusting.

5.1 ESTIMATION OF EMISSIONS

Sections 5.1.1 and 5.1.2 provide methods that can be used for predicting the emissions from materials handling and wind erosion sources associated with storage piles. The quantity of emissions estimated by these techniques are dependent on the physical characteristics of the stockpiled material, on the amount of material handled, and on the local meteorology.

If a fairly complete inventory of the area is needed, then the first step toward the determination of storage pile emissions for a given facility is to identify and map each pile within that facility. Figure 5-1 and Figure 5-2 are sample maps of an example facility X and of storage piles located within that facility, respectively. Once the piles have been identified, estimates can be obtained for the material throughput, the frequency with which the pile surface is disturbed, pile perimeter dimensions, average pile height, and vehicle specifications for any mobile equipment used on or around the storage piles. In addition, climatological data from the nearest recording weather station should be obtained.

Finally, any vehicular traffic related to the area must be identified and emissions estimated using the information presented in Section 4. Figure 5-3 shows typical storage pile emissions for vehicular traffic and materials handling operations.

5.1.1 Estimation of Emissions from Materials Handling Stockpiled Material

Adding aggregate material to a storage pile or removing it usually involves the dropping of material onto a receiving surface or receptacle. This can be performed by one of two methods: by continuous feed as exemplified by conventional fixed stacker reclaimers, or by batch operations such as would be performed by mobile equipment (i.e., front-end loader, truck, or pan scraper).

In order to estimate the emissions from the loading of material in and out of storage piles, one must first obtain a sample of the stockpiled material and a record of historical wind data at that location (Summaries of Local Climatological Data).[1] From the Local Climatological Data (LCD), the mean wind speed can be obtained for the nearest recording weather station (as illustrated by Figure 5-4). This wind speed can be adjusted from the recording anemometer height to represent the wind speed at the average storage pile height by using the procedure described in Section 11.2.7 of EPA's *Compilation of Emission Factors* (AP-42).[2] Aggregate sampling and subsequent moisture analysis should then be performed on the sample(s) as described in Appendix F.

Once the mean wind speed and the material moisture content have been determined, the following equation can be used to estimate emissions from the transfer operations (batch or continuous drop):

$$E = k\ (0.0016)\ \frac{\left(\frac{U}{2.2}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \quad \text{(kg/Mg)} \qquad (5\text{-}1)$$

where: E = emission factor
k = particulate size multiplier (dimensionless) = 0.35 for PM_{10}
U = mean approach wind speed (m/s), at height of transfer operation
M = material moisture content (percent)

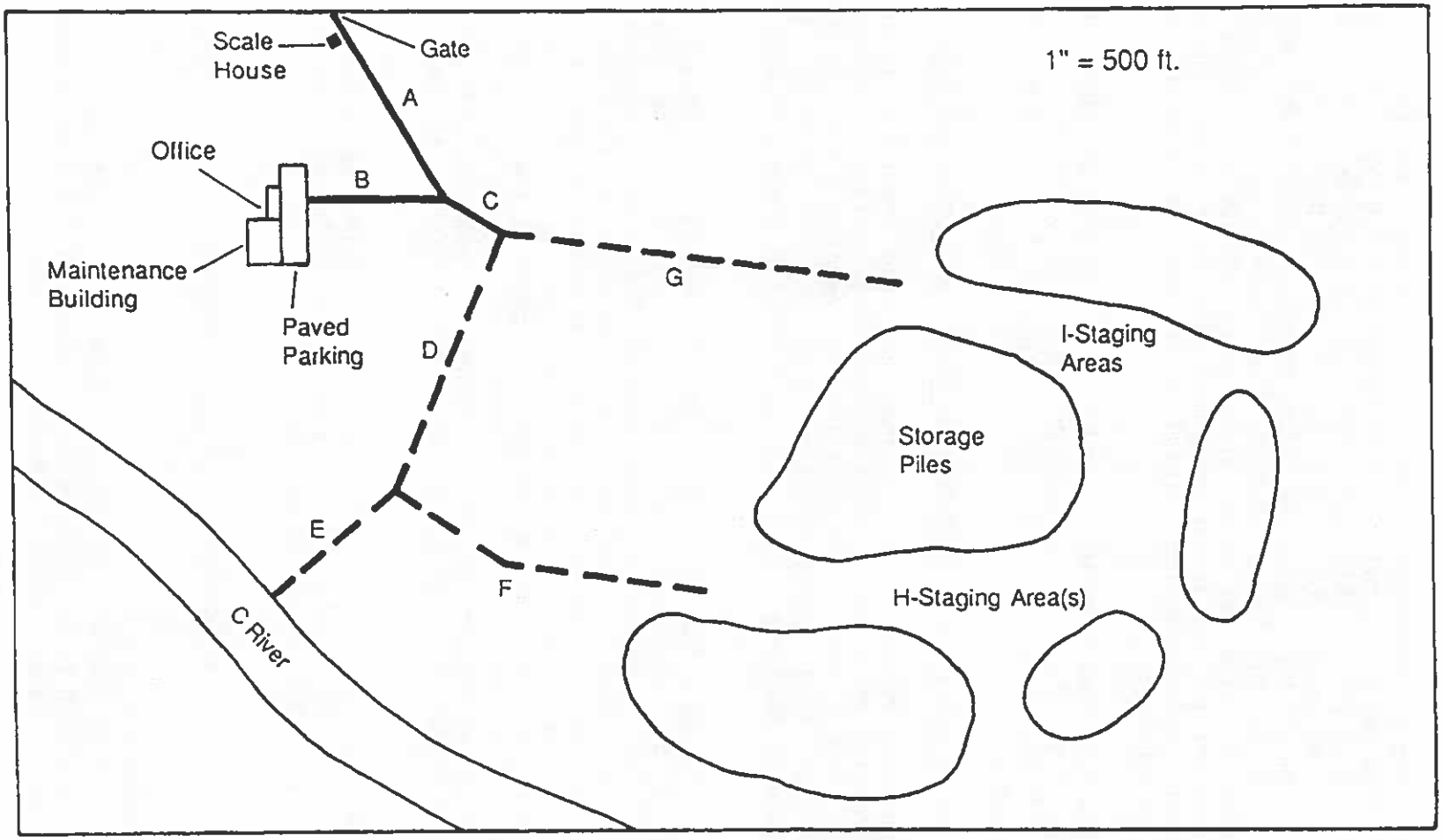


Figure 5-1. Map of example facility X.

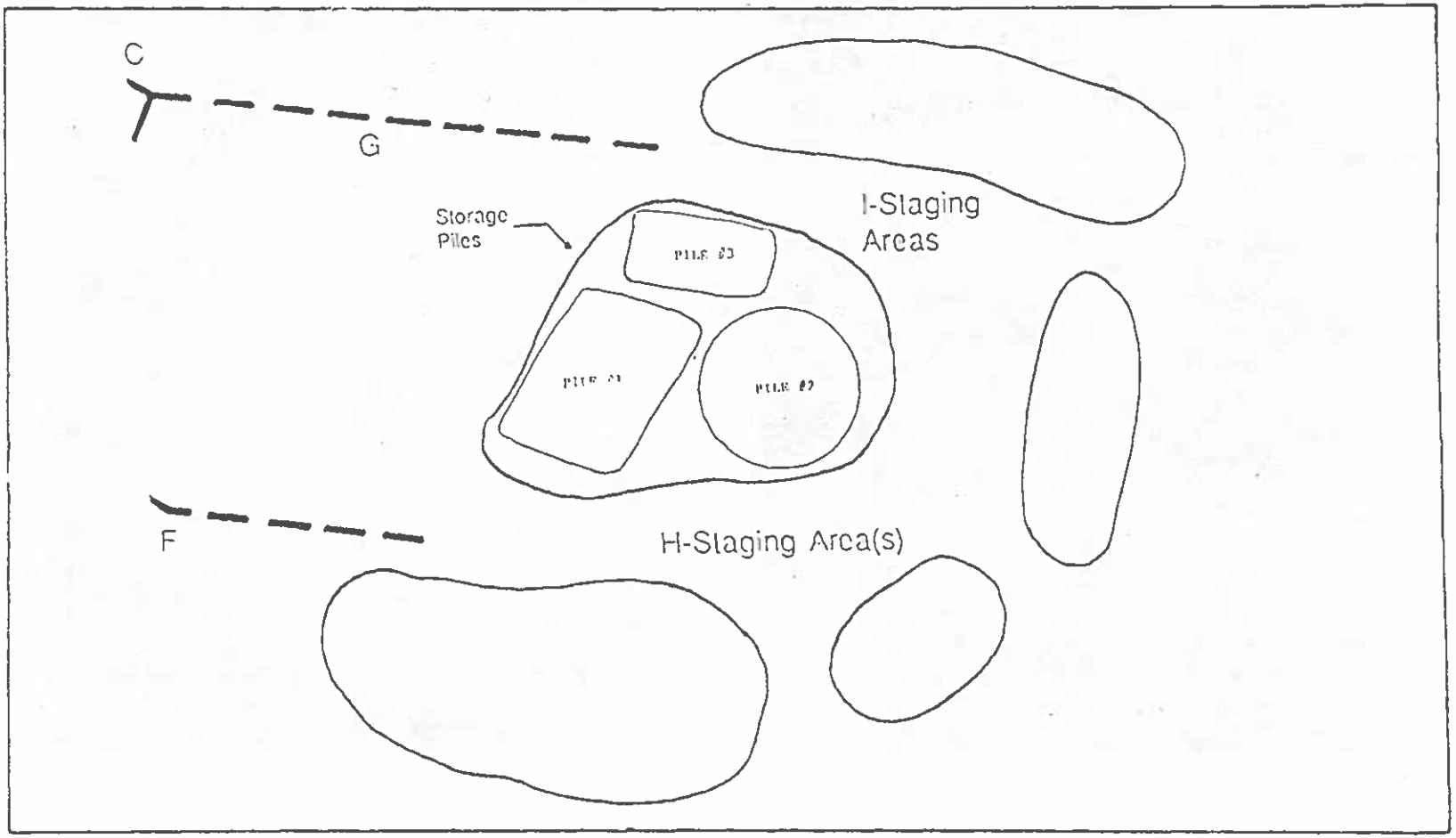
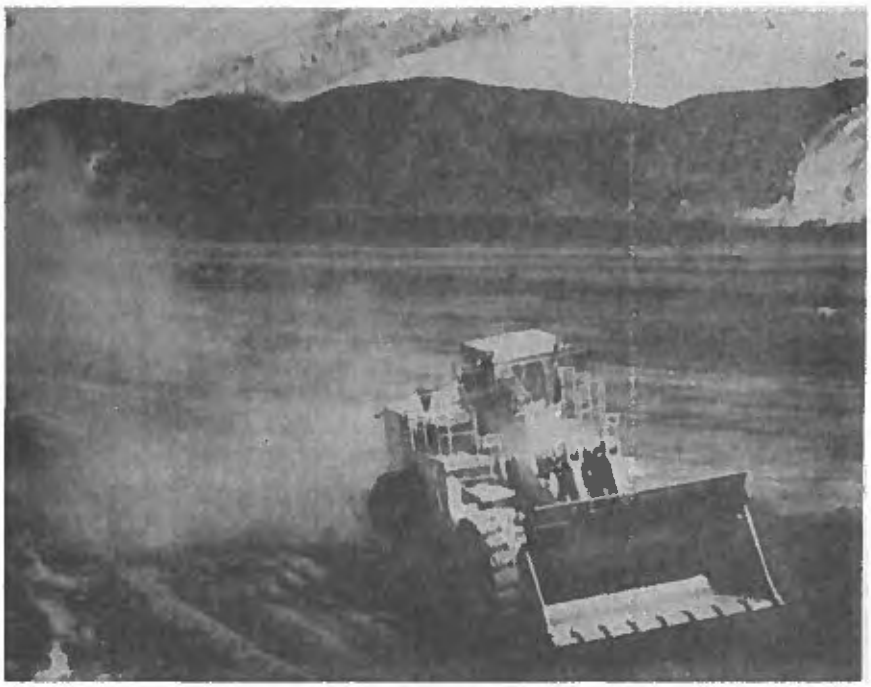


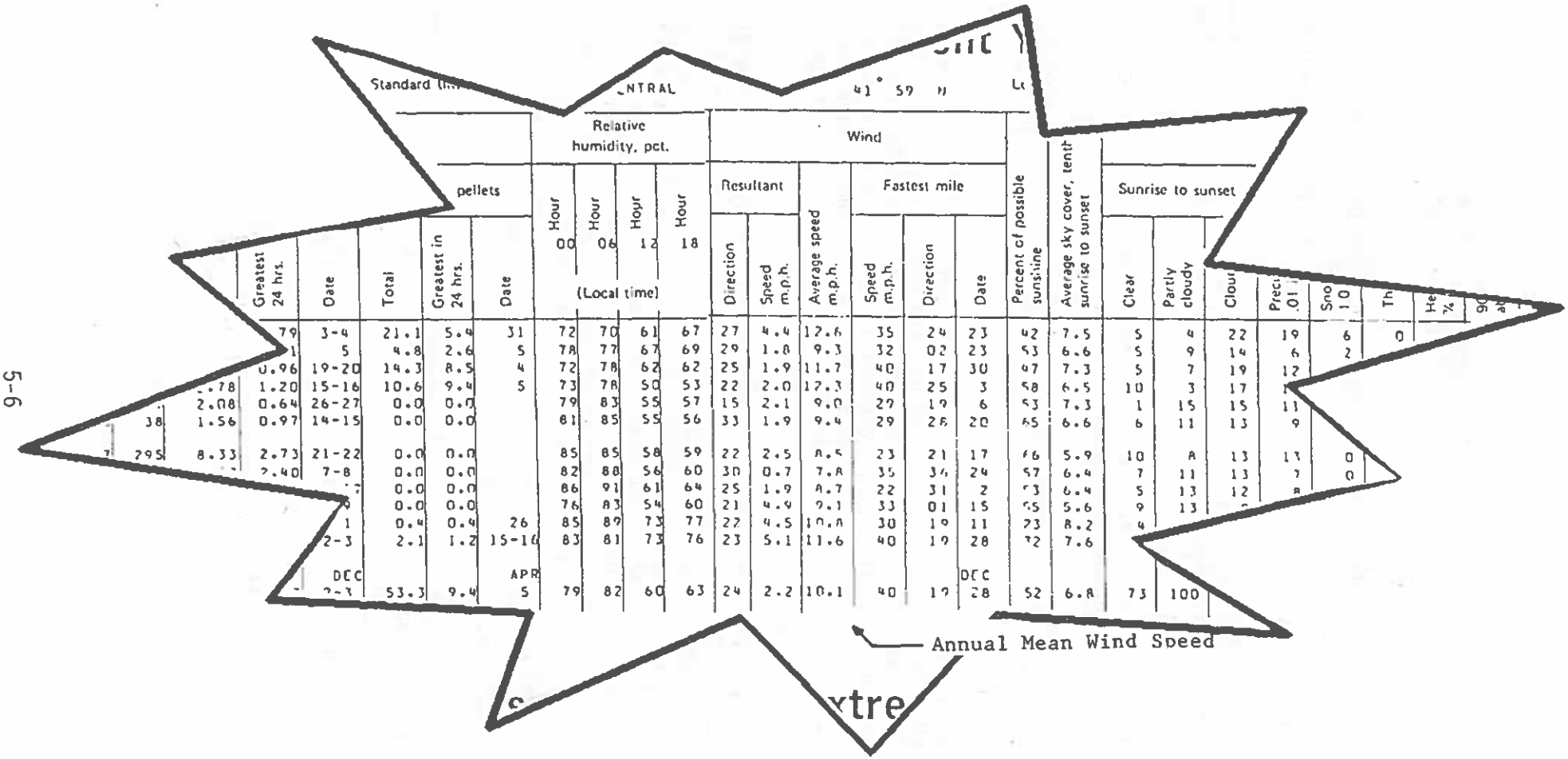
Figure 5-2. Map of storage piles located within facility X.



(a) Storage pile vehicular traffic.

(b) Storage pile load-in with boom stacker.

Figure 5-3. Typical storage pile emission sources.



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pellets						Relative humidity, pct.				Wind						Percent of possible sunshine	Average sky cover, tenths sunrise to sunset	Sunrise to sunset									
	Greatest 24 hrs.	Date	Total	Greatest in 24 hrs.	Date	Hour 00 (Local time)	Hour 06 (Local time)	Hour 12 (Local time)	Hour 18 (Local time)	Resultant Direction	Resultant Speed m.p.h.	Average speed m.p.h.	Fastest mile Speed m.p.h.	Fastest mile Direction	Fastest mile Date			Clear	Partly cloudy	Clou...	Preci... .01	Sno... 10	Th...	He... %	90...
	79	3-4	21.1	5.4	31	72	70	61	67	27	4.4	12.6	35	24	23	42	7.5	5	4	22	19	6	0		
	1	5	4.8	2.6	5	78	77	67	69	29	1.8	9.3	32	02	23	53	6.6	5	9	14	6	2			
	0.96	19-20	14.3	8.5	4	72	78	62	62	25	1.9	11.7	40	17	30	47	7.3	5	7	19	12				
	.78	1.20	15-16	10.6	9.4	5	73	78	50	53	22	2.0	12.3	40	25	3	58	6.5	10	3	17	7				
	2.08	0.64	26-27	0.0	0.0		79	83	55	57	15	2.1	9.0	29	19	6	53	7.3	1	15	15	11				
38	1.56	0.97	14-15	0.0	0.0		81	85	55	56	33	1.9	9.4	29	26	20	65	6.6	6	11	13	9				
295	8.33	2.73	21-22	0.0	0.0		85	85	58	59	22	2.5	8.5	23	21	17	66	5.9	10	8	13	13	0			
		2.40	7-8	0.0	0.0		82	88	56	60	30	0.7	7.8	35	34	24	57	6.4	7	11	13	7	0			
				0.0	0.0		86	91	61	64	25	1.9	8.7	22	31	2	73	6.4	5	13	12	8				
				0.0	0.0		76	83	54	60	21	4.9	9.1	33	01	15	65	5.6	9	13						
		1	0.4	0.4	26	85	89	73	77	22	4.5	10.8	30	19	11	23	8.2	4							
		2-3	2.1	1.2	15-16	83	81	73	76	23	5.1	11.6	40	19	28	72	7.6								
		DEC			APR										DEC										
		2-3	53.3	9.4	5	79	82	60	63	24	2.2	10.1	40	19	28	52	6.8	73	100						

Annual Mean Wind Speed

...xtre...

Figure 5-4. Mean wind speed.

This equation shows that, for the handling of aggregate materials, emissions increase with the ambient wind speed and are reduced as the material moisture content increases.

5.1.2 Estimation of Emissions from Wind Erosion of Stockpiled Material

Field testing of various stockpiled surfaces using a portable wind tunnel has demonstrated that;

a. Threshold wind speeds exceed 5 m/s (11 mph) at 15 cm above the pile surface which is equivalent to 10 m/s (22 mph) at 7 m above the pile surface.

b. Particulate emission rates tend to decay rapidly (half life of a few minutes) during an erosion event.

c. Precipitation events cause natural crusting of surface material by binding the erodible material, thereby reducing the erosion potential.

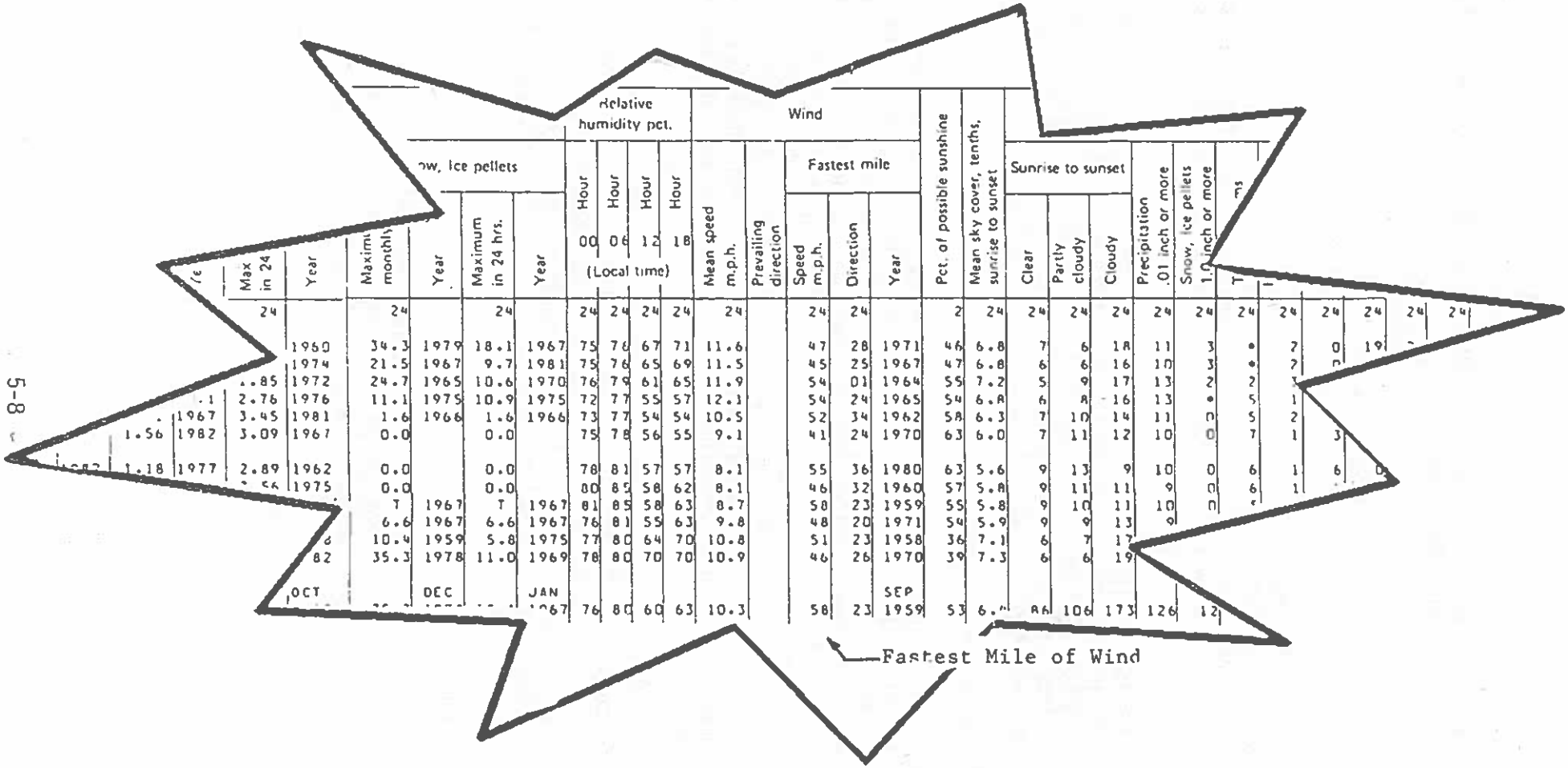
Although in some instances wind erosion can be substantial, wind erosion is usually considered the least significant of the mechanisms responsible for dust emissions from storage piles. In most industrial settings, fugitive emissions from vehicular traffic and materials handling overwhelm emissions from wind erosion. If vehicular traffic is present in and around the storage pile area, those emissions are generally far greater than that due to materials handling.

If it is necessary to estimate the particulate emissions from the wind erosion of storage piles, one must first obtain an aggregate sample of the stockpiled material and a record of historical wind data for the nearest recording meteorological station. From the Local Climatological Data (LCD) the fastest mile of wind can be obtained for the nearest recording weather station (as illustrated by Figure 5-5). The fastest mile of wind should then be adjusted to represent the wind speed that impacts the storage pile surface and an equivalent friction velocity determined as described in Section 11.2.7 of AP-42.[2] Aggregate sampling and determination of the threshold friction velocity should also be performed according to the procedures described in Appendix F and AP-42, respectively.[2]

Once the friction velocity and the threshold friction velocity have been determined, the erosion potential (P) can be calculated as:

$$P = 58\ (u^* - u^*_t)^2 + 25\ (u^* - u^*_t) \qquad (5\text{-}2)$$

where: u^* = friction velocity (m/s)
u_t = threshold friction velocity (m/s)



	Max in 24	Year	Maximum monthly	Year	Maximum in 24 hrs.	Year	Relative humidity pct. 00 Hour (Local time)	06 Hour	12 Hour	18 Hour	Mean speed m.p.h.	Prevailing direction	Fastest mile: Speed m.p.h.	Direction	Year	Pct. of possible sunshine	Mean sky cover, tenths, sunrise to sunset	Sunrise to sunset: Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, ice pellets 1.0 inch or more	T	ms
	24		24		24		24	24	24	24	24		24	24		2	24	24	24	24	24	24	24	24
		1960	34.3	1979	18.1	1967	75	76	67	71	11.6		47	28	1971	46	6.8	7	6	18	11	3	•	2
		1974	21.5	1967	9.7	1981	75	76	65	69	11.5		45	25	1967	47	6.8	6	6	16	10	3	•	2
	.85	1972	24.7	1965	10.6	1970	76	79	61	65	11.9		54	01	1964	55	7.2	5	9	17	13	2	2	1
	.1	2.76	1976	11.1	1975	10.9	1975	72	77	55	57	12.1		54	24	1965	54	6.8	6	8	16	13	•	5	1
	1967	3.45	1981	1.6	1966	1.6	1966	73	77	54	54	10.5		52	34	1962	58	6.3	7	10	14	11	0	5	2
	1.56	1982	3.09	1967	0.0		0.0		75	78	56	55	9.1		41	24	1970	63	6.0	7	11	12	10	0	7	1	3
	1.18	1977	2.89	1962	0.0		0.0		78	81	57	57	8.1		55	36	1980	63	5.6	9	13	9	10	0	6	1	6	0
	.56			1975	0.0		0.0		80	82	58	62	8.1		46	32	1960	57	5.8	9	11	11	9	0	6	1		
					T	1967	T	1967	81	85	58	63	8.7		50	23	1959	55	5.8	9	10	11	10	0				
					6.6	1967	6.6	1967	76	81	55	63	9.8		48	20	1971	54	5.9	9	9	13	9					
					10.4	1959	5.8	1975	77	80	64	70	10.8		51	23	1958	36	7.1	6	7	17						
					35.3	1978	11.0	1969	78	80	70	70	10.9		46	26	1970	39	7.3	6	6	19						
				OCT		DEC		JAN									SEP										
								1967	76	80	60	63	10.3		58	23	1959	53	6.[illegible]	86	106	173	126	12				

Fastest Mile of Wind

Figure 5-5. Fastest mile of wind.

The emission factor, as a summation over periods between material disturbances, can now be calculated as:

$$\text{Emission factor} = k \sum_{i=1}^{N} P_i \qquad (5\text{-}3)$$

where: k = particle size multiplier = 0.5 for PM_{10}
n = number of disturbances per year
P_i = erosion potential corresponding to the observed (or probable) fastest mile of wind for the i^{th} period between disturbances (g/m^2)

In summary, emissions from wind erosion increase with the speed of wind gusts and with the number of times that the material is disturbed. These emissions can be controlled by reducing wind speeds and the number of disturbances or by increasing the threshold friction velocity (which is a function of the exposed surface particle size distribution).

5.1.3 Material Parameters Affecting Emissions

The two material properties that affect the quantity of emissions from material handling and wind erosion are the materials threshold friction velocity and its unbound moisture content. The threshold friction velocity is a quantitative description of the condition under which the surface material will begin to erode. It is a function of the material aggregate size distribution, density, and moisture content. The threshold friction velocity can be estimated by performing the sieving procedure outlined in Section 11.2.7 of AP-42. The moisture content of a given material simply describes the amount of water retained on the surface of the aggregate material (see Appendix F).

Typical silt values, and unbound moisture content values for some industrial aggregate materials are summarized in Table 5-1. Threshold friction velocities and the associated wind speeds (as measured at 10 m) are presented in Tables 5-2 and 5-3 for typical aggregate materials and soils, respectively. Estimates for emissions are considered more accurate if site specific data are used.

5.2 EMISSION CONTROL METHODS

As described in Table 5-4, there are a variety of options for the control of particulate emissions from storage piles. Note that these controls fall into one of four general categories. Each of these is discussed in greater detail below.

TABLE 5-1. TYPICAL SILT AND MOISTURE CONTENT VALUES OF MATERIALS AT VARIOUS INDUSTRIES

Industry	Material	No. of test samples	Silt, percent		No. of test samples	Moisture, percent	
			Range	Mean		Range	Mean
Iron and steel production[a]	Pellet ore	10	1.4-13	4.9	8	0.64-3.5	2.1
	Lump ore	9	2.8-19	9.5	6	1.6-8.1	5.4
	Coal	7	2-7.7	5	6	2.8-11	4.8
	Slag	3	3-7.3	5.3	3	0.25-2.2	0.92
	Flue dust	2	14-23	18.0	0	NA	NA
	Coke breeze	1		5.4	1		6.4
	Blended ore	1		15.0	1		6.6
	Sinter	1		0.7	0	NA	NA
	Limestone	1		0.4	0	NA	NA
Stone quarrying and processing[b]	Crushed limestone	2	1.3-1.9	1.6	2	0.3-1.1	0.7
Taconite mining and processing[c]	Pellets	9	2.2-5.4	3.4	7	0.05-2.3	0.96
	Tailings	2	NA	11.0	1		0.35
Western surface coal mining[d]	Coal	15	3.4-16	6.2	7	2.8-20	6.9
	Overburden	15	3.8-15	7.5	0	NA	NA
	Exposed ground	3	5.1-21	15.0	3	0.8-6.4	3.4

[a]References 2 through 5. NA = not applicable.
[b]Reference 1.
[c]Reference 6.
[d]Reference 7.

TABLE 5-2. THRESHOLD FRICTION VELOCITIES--ARIZONA SITES

Location	Threshold friction velocity, m/sec	Roughness height, (cm)	Threshold wind velocity at 10 m, m/sec
Mesa - Agricultural site	0.57	0.0331	16
Glendale - Construction site	0.53	0.0301	15
Maricopa - Agricultural site	0.58	0.1255	14
Yuma - Disturbed desert	0.32	0.0731	8
Yuma - Agricultural site	0.58	0.0224	17
Algodones - Dune flats	0.62	0.0166	18
Yuma - Scrub desert	0.39	0.0163	11
Santa Cruz River, Tucson	0.18	0.0204	5
Tucson - Construction site	0.25	0.0181	7
Ajo - Mine tailings	0.23	0.0176	7
Hayden - Mine tailings	0.17	0.0141	5
Salt River, Mesa	0.22	0.0100	7
Casa Grande - Abandoned agricultural land	0.25	0.0067	8

TABLE 5-3. THRESHOLD FRICTION VELOCITIES--INDUSTRIAL AGGREGATES

Material	Threshold friction velocity, m/s	Roughness height, cm	Threshold wind velocity at 10 m (m/s)		Ref.
			z_o = actual	z_o = 0.5 cm	
Overburden[a]	1.02	0.3	21	19	7
Scoria (roadbed material)[a]	1.33	0.3	27	25	7
Ground coal[a] (surrounding coal pile)	0.55	0.01	16	10	7
Uncrusted coal pile[a]	1.12	0.3	23	21	7
Scraper tracks on coal pile[a,b]	0.62	0.06	15	12	7
Fine coal dust on concrete pad[c]	0.54	0.2	11	10	12

[a]Western surface coal mine.
[b]Lightly crusted.
[c]Eastern power plant.

TABLE 5-4. CONTROL TECHNIQUES FOR EMISSIONS FROM STORAGE PILES

Containment	Buildings\Silos Wind fences Selective siting
Surface Treatments	Watering Chemical stabilization - Petroleum resins - Acrylic cements - Other
Source Extent	Reduced transfer operations Reduced disturbance area Reduced vehicular traffic
Natural Events	Previous erosion of fines Crusting by precipitation

5.2.1 Emissions Control by Containment

Storage piles are usually left exposed to the ambient winds because of the costs associated with enclosures and the impediment that enclosures can cause to the frequent material transfer often necessary. Containment of these piles can be described as the physical separation of the storage pile from the ambient air and its associated winds. Typically used containment strategies include shielding by topography, wind fences, neighboring buildings, or other storage piles; or partial or complete enclosure of the storage pile with a dedicated structure.

Containment by selective siting is often an inexpensive method of removing a storage pile from the winds that could generate emissions. It can include the placement of an active storage pile within several more dormant piles, within a natural depression, or among buildings.

The erection of a dedicated structure for containment of storage piles is also practiced within industry. These structures often consist of wind fences, three sided bunkers, silos, or completely enclosed buildings or bins. Although potentially expensive and somewhat restrictive, this is a very effective method of controlling particulate emissions. Often this method is used to protect materials which deteriorate in weather, for the conservation of expensive minerals, or to control emissions from small storage piles of fine, highly erodible material.

5.2.2 Emissions Control by Surface Treatments

Surface treatments are used to wet or agglomerate exposed fine material. Commonly used surface treatments include water (alone, with surfactants, or with salts), petroleum binders, and latex binders. These methods can be very effective until the time when the treated surface is disturbed or covered. Water with or without wetting agents such as salts, surfactants, and foams are commonly used to control emissions from active storage piles. This technique affects material to a much greater depth then can be reached by binding agents and produces a substantially greater control efficiency for emissions from materials handling. Surface treatments accomplish wind erosion control by increasing the threshold friction velocity of an exposed material.

5.2.3 Emissions Controlled by Source Extent Reduction

Source extent control refers to limiting the amount of aggregate material put through storage (materials handling) or the surface area disturbed (wind erosion). This can include reducing the number of material transfer operations necessary in a process, restricting the area disturbed by transfer and pile maintenance operations, or restricting the amount of vehicular traffic permitted on or around stockpiled material.

5.2.4 Emissions Control by Natural Methods

Finally, simply allowing the pile to crust naturally is an effective control technique for wind erosion control of most stockpiled materials. Wind erosion events remove the exposed surface fine particulate, leaving behind the

coarse nonerodible aggregate. In addition, naturally occurring precipitation tends to agglomerate most aggregate material. Inactivity can provide a natural crust comparable to those achieved by surface treatments

5.3 REGULATORY FORMATS AND ASSOCIATED INSPECTION PROCEDURES

Once a specific PM_{10} control strategy has been conceived, approved, and implemented, it becomes necessary for the control agency to assure that it is being complied with and is achieving the desired level of control. This section will discuss methods for determining compliance, along with inspection procedures for various storage pile control strategies.

5.3.1 General Inspection Procedures and Compliance Information

5.3.1.1 General Inspection Procedures--

Figure 5-6 is an example inspection form which may be completed by interviewing plant personnel at the beginning of a Level II or Level III inspection. After discussing any changes in sources since the last inspection with plant personnel, a more through field inspection should be performed.

Field inspections of control programs for dust from storage piles could include the following steps:

1. Verification of sources located within the facility.
2. Qualitative inspection of surface material moisture or crusting.
3. Spot checks on the control application.
4. Spot checks on storage pile source extent.
5. Surface material sampling so that emissions can be estimated.

Each of these is discussed in more detail below.

The first step in any field inspection is a simple drive or walk through the facility to verify the continued existence of previous sources, the absence of new sources, and any changes identified by plant personnel.

To determine the effectiveness of strategies that depend on containment techniques for dust control, a qualitative inspection should be adequate. This inspection would simply require a verification of the existence and integrity of the specified enclosure to determine compliance.

To determine compliance for a watering program, it is often adequate simply to pick up handfuls of the storage pile surface material and examine for wetness or to observe material transfer operations for emissions. Portable moisture instruments may also be useful to estimate the overall moisture content of the pile material. If visible emissions are observed, an aggregate sample may be collected for moisture analysis, as described in Appendix F to determine compliance as appropriate.

Business License Name of Corporation, Company, or Individual Owner or Governmental Agency:

Mailing Address:

Plant Address:

Name and Title of Company Representative:

Telephone Number:

Name of Official Conducting Inspection:

General Questions for Plant Personnel	Yes*	No	N/A	Comments
1. Any new storage piles since last inspection?				
2. Have any storage piles been deleted since last inspection?				
3. Have any storage piles been left dormant since last inspection?				
4. Has any of the source extent associated with storage piles changed since last inspection (i.e., reduced transfer operations, material drops heights, material thruput, and vehicular traffic on or around piles)?				
Controls				
5. Have any changes been made in control program since last inspection?				
Watering				
6. Any new equipment?				
7. Any equipment downtime since last inspection?				
Chemicals				
8. Any receipts since last inspection?				
9. Any new equipment?				
10. Any equipment downtime since last inspection?				
11. Any supplemental control since last inspection?				

* If any answer is yes, complete comment section.

Figure 5-6. Sample inspection form.

A qualitative inspection of surface treatment controls on undisturbed portions of storage piles should verify that a control has been applied, and also that it has been applied in a somewhat uniform manner over the entire exposed surface. This is important because the uneven application of a surface treatment can severely compromise the net control efficiency, regardless of the amount applied. Visual inspection is usually adequate to determine where binders have been applied to aggregate material.

If large areas of inspected storage piles are found to be dry or uncrusted (for water and chemically treatments, respectively), then these deficiencies should be noted. If possible, it is recommended that the inspector observe at least one application of any surface control to verify application intensity and the uniformity of the application. This can be done by placing preweighed pans on the stockpile surface during the control application, reweighing them after the application, and dividing the mass collected by the area of the pan.

In addition, note should be made of the source extent of materials handled, of the amount of vehicle traffic on and around the stockpiles, and of any visible emissions from these sources. Visible emissions can indicate inadequacy in the control plan or its implementation.

For storage piles that are controlled simply by their dormant nature, compliance can usually be determined by visual observation that the surface (and any crust) has not been disturbed.

5.3.1.2 Plant Record Keeping Requirements--

Determination of storage pile control compliance by the review of plant records can be performed for surface treatment controls and for reduced source extent strategies. For surface treatments, plant records must be kept to document the date, time, amount, and dilution (if applicable) of water/chemical suppressant applied, and a description of where that control was applied. For strategies based on reductions in source extent, records must be kept of the amount of material transferred, the dates and times of equipment usage for this transfer, or of vehicular usage on and around the storage piles.

Record keeping for a storage pile dust control plan should include the following elements:

Watering

- The amount of water applied to each stock piled material and the proposed frequency of application.

- Any provisions for the reduction or suspension of the control application during periods of inactivity or during specified weather events (e.g., 1/4 in of rainfall to substitute for one treatment; program suspended during freezing periods or during production shutdowns; watering frequency as a function of temperature, cloud cover, etc.).

- Source of water and a description of any additives for performance enhancement (i.e., salts, surfactants, etc.).

Chemical Treatments

- Type of chemical to be applied to each storage pile, the dilution ratio, application intensity, and the frequency of application.

- Any provisions for the reduction or suspension of the control application during periods of material inactivity or during specified weather events (e.g., 1/4 in of rainfall to substitute for one treatment; program suspended during freezing periods; watering frequency as a function of temperature, cloud cover, etc.).

Source Extent Reductions

- The time and identification of any mobile equipment used in the storage pile area before and after implementation of the control plan.

- The times when any fixed stacker-reclaimer equipment would be used, and an estimate of how much material was moved before and after implementation of the control plan.

5.3.2 Watering

5.3.2.1 Record Keeping Review

To determine compliance from plant records, the facility must have records that include:

1. Date of treatment.

2. Operators identification as a signature or initials (note that the operator may keep a separate log from which information is transferred to the environmental staff's data sheets).

3. Start and stop times of the treatment on each storage pile, approximate amount of water used, and the approximate area treated.

4. Description of any additive used (i.e., salts, surfactants, etc.).

Figure 5-7 is an example form which the equipment operator can complete when applying water to storage piles. In addition, plant-wide records must be kept which include:

1. Equipment maintenance records.

2. Meteorological log (to document the influence of weather on the control program).

3. Documentation of any equipment malfunctions or downtime.

Facility X Water Control Program--Operator's Log

Date	Tank Fill Time Start	Tank Fill Time Stop	Road Segments/Areas Treated Start		Stop	Comments	Op. Initials
6/01	6:00	6:10	6:20	pole #1	6:50		JPM
6/01	7:00	7:10	7:20	"	7:45		JPM
6/01			7:50	pole #2	7:56		JPM
6/01	8:10	8:15	9:20	pole #3	9:36		JPM
6/02	5:50	5:40	5:50	pole #1	6:15		JPM
6/02	6:25	6:35	6:45	"	7:00		JPM
6/02			7:05	pole #2	7:15		JPM
6/02	7:20	7:30	7:40	pole #3	8:00		JPM
6/06	7:00	7:10	7:25	pole #1	7:45		JPM
6/06	7:55	8:05	8:15	"	8:30		JPM
6/06			8:40	pole #2	8:50		JPM
6/06	9:00	9:10	9:20		9:35		JPM

Figure 5-7. Operator's log for example facility X.

Documentation which contains these elements will allow an inspector to determine compliance by reviewing the historical data. Below, a procedure is described which allows the inspector to perform an on-site, independent assessment of the control.

5.3.2.2 Example Compliance Determination--Record Keeping for a Watering Program--

This example considers the hypothetical facility X which is shown in Figure 5-1 with the storage piles shown in greater detail in Figure 5-2. Facility X is located in a PM_{10} nonattainment area and has an approved dust control plan that specifies the following conditions:

1. Application intensity > 0.15 gal/yd^2.

2. Application frequency of once/10 h workday.

3. Watering according to the application parameters is to be performed from April 1 through October 31.

4. Each 1/4 in of rainfall (in the previous 24 h) will be substituted for one treatment, and the program will be suspended for days where the morning temperature (8 a.m.) does not exceed 32°F.

Note that the permit also specifies watering between 11:00 a.m. and 3:00 p.m. when the ambient temperature at 11:00 a.m. is ≥ 40°F for the period from November 1 to March 31.

An example of how records could be used to determine compliance for facility X is given below. Facility X maintains the following three storage piles:

Storage Pile	Height (ft)	Approx. Area (sq. ft)	Throughput (tons/yr)
1	20	5,000	10,000
2	15	1,500	500
3	15	2,500	4,000

The facility leases one 5,000-gal water truck and operator from a contractor on an as needed basis. This equipment has a water cannon capable of spraying water 50 ft. No additives to the water are used at this facility.

Example records kept by facility X to document its program of watering storage piles are shown in Figure 5-8 (meteorological data log), and Figure 5-7 (operator's log). The inspector responsible for the facility would, in practice, compare these two records with the permit conditions to determine compliance. This check should verify that all storage piles have been treated daily (except after significant rainfall or under freezing conditions).

Facility X Meteorological Data Log

Month/Year: 06/89 Observer JPM

Day	Obs. Time	Precipitation (in)	Temperature (°F)	Comments
01	8:05	-	64	
02	8:05	-	64	
03				
04				
05	8:10	0.10	78	Rained on Sunday
06	8:10	-	72	
07	8:10	-	73	
08	8:10	0.08	72	
09	8:10	-	77	
10				
11				
12	8:05	3.12	56	Rained Sat & Sun, Roads Muddy
13	8:05	-	67	Roads still visibly wet (puddles)
14	8:05	-	71	Roads dry enough to water
15	8:05	-	74	
16	8:05	-	77	
17				
18				
19	8:05	0.66	64	Roads wet -- No watering
20	8:05	-	70	
21	8:05	-	74	
22	8:05	0.27	79	Skip morning application
23	8:05	-	79	
24				
25				
26	8:05	T	74	
27	8:05	-	76	
28	8:05	-	76	
29	8:05	-	78	
30	8:05	-	75	
31				

T = Trace

Figure 5-8. Meteorological data for example facility X.

If it is suspected that the documentation is inaccurate (i.e., treatments are logged for periods where no water was applied), then the operator's log can be cross-checked against other records. For example, cross-checking would be performed against facility records for maintenance/service of the water truck, or against contractor invoices if the equipment is leased, as in the above example. Both of these sources typically contain more complete records then those kept for an emissions control program. If these records do not match the operator's log, then the facility should be required to submit a written explanation for the apparent discrepancy.

Information compiled in the operator's log represents critical data against which operations observed during Level II and Level III inspections should be evaluated. For example, Figure 5-7 provides a basis for estimating the typical length of time and number of trucks full of water were required to wet all of the storage piles within a facility. These values can be checked against an application observed during the inspection. If the during the inspection, the observed time for an application or required number of trucks full of water required to treat a group of storage piles varies significantly from what is indicated in the operator's log, then the inspector should require the facility to explain the apparent discrepancy. As stated above, this inspection should also verify that the water is being applied somewhat uniformly to the storage piles surface area.

An example that applies this procedure to facility X is demonstrated below:

1. On June 1, the operator's log indicates that the first two trucks full of water were used to wet storage pile Nos. 1 and 2 and a third truck full of water was used to wet storage pile No. 3.

2. About 10 min was required to fill each of the first two trucks, and only 5 min to fill the third truck.

3. The log also indicates that the treatment of storage pile No. 1 required 25 min to empty the first truck of water, and 15 min to complete the pile with the second truck of water. Treatment of storage pile No. 2 took 6 min, and treatment of storage pile No. 3 took 16 min.

4. During the inspection it is noted that 10 min is required to fill the truck and 12.5 min of actual spraying time to empty it.

From these data it can be assumed that approximately 8,000 gal of water was probably applied to storage pile No. 1 (0.18 gal/yd^2) from the first two trucks; about 2,000 gal was probably applied to storage pile No. 2 (0.1 gal/yd^2) with what was left in the second truck; and finally if 0.15 gal/yd^2 was applied to piles 1 and 2 then truck 2 came back empty, and only about 2,500 gal (5 min to fill the third truck) was available for pile No. 3 (0.1 gal/yd^2). These estimates indicate a potential violation of the minimum application intensity of 0.15 gal/yd^2 specified in the dust control plan.

5.3.2.3 "In-Plant" Inspection Procedures

An "in-plant" inspection to determine compliance with fugitive dust rules or permit conditions for storage piles involves focusing on several items. They include:

- A visual inspection of the facility to verify that all of the existing storage piles are listed in the permit/control plan.
- An examination of the source's records (as described above) documenting frequency of water application, amount applied, storage piles watered, meteorology affecting watering, etc.
- Observation of any spraying operations undertaken during the inspectors visit.

After becoming familiar with the plant facilities and the control plan, the inspector should request that the plant personnel provide the information necessary to complete the example work sheet shown in Figure 5-6. The inspector should then conduct a full inspection of the facility in order to obtain and verify the actual control conditions. If water is being applied on the day of the inspection, then this should be observed as described above.

If there is a minimum moisture content criteria specified in the control plan/operating permit, then the inspector could spot-check the moisture content of stockpiled material by using the procedure described in Appendix F. If there is a question as to whether the current control strategy is adequate, an aggregate sample should be taken so that emissions can be estimated as described in Section 5.1. Finally, the inspector should review the plant records to verify that the controls have been applied appropriately since the last inspection.

5.3.3 Chemical Treatments

5.3.3.1 Example Compliance Determination--Record Keeping for a Chemical Control Program--

This example considers the hypothetical facility X shown in Figure 5-1 with the storage piles shown in greater detail in Figure 5-2. Facility X is located in a PM_{10} nonattainment area and has an approved dust control plan that specifies the following conditions:

1. Application of an emulsified petroleum dust suppressant.
2. Application intensity >0.1 gal/yd^2.
3. Dilution of 1 part suppressant to 10 parts water.
4. Application frequency of twice/work week if material has been disturbed since the last application. Once/2 weeks for dormant material.
5. Chemical suppression according to the application parameters is to be performed from April 1 through October 31.

6. Each 1/4 in of rainfall (in the previous 24 h) will be substituted for one treatment, and the program will be suspended for days where the morning temperature (8 a.m.) does not exceed 32°F.

Note that the permit also specifies chemical suppression between 11:00 a.m. and 3:00 p.m. when the ambient temperature at 11:00 a.m. is ≥ 40°F for the period from November 1 to March 31.

An example of how records could be used to determine compliance for facility X is given below. Facility X maintains the following three storage piles:

Storage pile	Height (ft)	Approx. area (sq ft)	Throughput (tons/yr)
1	20	5,000	10,000
2	15	1,500	500
3	15	2,500	4,000

The facility leases one 5,000-gal water truck and operator from a contractor on an as-needed basis. This equipment has a water cannon capable of spraying the suppressant 50 ft. The facility has a receipt for a 5,000 gal order of Coherex® that was delivered in late March. By multiplying the total storage pile area, 1,000 yd^2 by the required 0.1 gal of Coherex required per yd^2 per application, it can be estimated that about 100 gal of Coherex are used per application day. Example records kept by facility X to document days for which the treatment of storage piles was not necessary, are shown in Figure 5-8 (meteorological data log). Plant personnel indicated that other than rain days, there were no days when treatments were not applied. The inspector responsible for the facility would, in practice, compare the amount of Coherex used from the storage tank with what the records and invoices indicate should have been used.

If there are claims that treatments have been reduced because the material has been dormant, then records kept by the storage yard foreman can often be checked for verification. These checks should verify when storage piles have been treated.

If it is suspected that the documentation is inaccurate (i.e., treatments are logged for periods where no suppressant was applied), then the operator's log can be cross-checked against other records. For example, cross-checking would be performed against facility records for maintenance/service of the water truck or, against contractor invoices if the equipment is leased, as in the above example. Both of these sources typically contain more complete records then those kept for a control program. If the two sets of records do not match, then the facility should be required to submit a written explanation for the apparent discrepancy.

Information compiled in the operator's log also represents critical data against which operations observed during Level II and Level III inspections

should be evaluated. For example, Figure 5-9 provides a basis for estimating the typical length of time and number of trucks full of suppressant required to treat all of the storage piles within a facility. These values can be checked against an application observed during the inspection as described for watering in 5.3.2.

If during the inspection the observed time for an application or required number of trucks full of suppressant necessary to treat a given group of storage piles varies significantly from what is indicated in the operator's log, then the inspector should require that the facility explain the apparent differences. As stated above, this inspection should also verify that the suppressant is being applied somewhat uniformly to the storage piles surface area. This can be performed by placing preweighed pans on the stockpile surface during the control application, reweighing them after the application, and dividing the mass collected by the pans area.

5.3.3.2 "In-Plant" Inspection Procedures--

An "in-plant" inspection to determine compliance with fugitive dust rules or permit conditions for storage piles involves focusing on several items. They include:

- A visual inspection of the facility to verify that all of the existing storage piles are listed in the state permit/control plan.
- An examination of the source's records (as described above) documenting frequency of suppressant application, amount applied, storage piles treated, meteorology and plant activity affecting treatment requirements, etc.
- Observation of any spraying operations undertaken during the inspectors visit.

After becoming familiar with the plant facilities and the control plan, the inspector should request that the plant personnel provide the information necessary to complete the example work sheet shown in Figure 5-6. The inspector should then conduct a full inspection of the facility in order to obtain and verify the actual operating conditions. If suppressant is being applied on the day of the inspection, then this should be observed as described above.

If there is a maximum silt content criteria specified in the control plan/operating permit, then the inspector could spot-check the silt content of stockpiled material by using the procedure described in Appendix F. If there is a question as to whether the current control strategy is adequate, an aggregate sample should be taken so that emissions can be estimated as described in Section 11.2.7 of EPA's AP-42. Finally, the inspector should review the plant records to verify that the controls have been applied appropriately since the last inspection.

Facility X Water Control Program--Operator's Log

Date	Tank Fill Time Start	Tank Fill Time Stop	Areas Treated Start	Areas Treated	Areas Treated Stop	Comments	Op. Initials
6/01	6:30	7:00	7:10	piles #1, 2, & 3	8:10		JMP
6/06	6:40	7:15	7:30	"	8:15		JMP
6/14	6:30	7:05	7:15	"	8:00		JMP
6/16	6:35	7:15	7:30	"	8:15		JMP
6/20	6:45	7:20	7:30	"	8:00		JMP
6/23	6:30	7:15	7:25	"	8:15		JMP
6/27	6:30	7:15	7:30	"	8:30		JMP
6/29	6:40	7:??	----	"	8:15		JMP

Figure 5-9. Operator's log for example facility X.

5.4 REFERENCES FOR SECTION 5

1. Local Climatological Data, Annual Summaries for 1988, Department of Commerce, National Oceanic and Atmospheric Administration, National Environmental Satellite, Data and Information Service, National Climatic Data Center, Federal Building, Asheville, NC 28801.

2. *Compilation of Air Pollutant Emission Factors*, Volume 1, Stationary Point and Area Sources, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711.

APPENDIX A

SIP REQUIREMENTS FOR THE CONTROL OF PM_{10}

APPENDIX A

SIP REQUIREMENTS FOR THE CONTROL OF PM_{10}

The following pages contain excerpts from the July 1, 1987, *Federal Register* pertaining to the revision of State Implementation Plans to include PM_{10}.

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

For the reasons set forth in the preamble, EPA amends Part 51 of Chapter I of Title 40 of the Code of Federal Regulations as follows:

1. The authority citation for Part 51 is revised to read as follows:

Authority: This rulemaking is promulgated under authority of sections 101(b)(1), 110, 160–169, 171–178, and 301(a) of the Clean Air Act 42 U.S.C. 7401(b)(1), 7410, 7470–7479, 7501–7508, and 7601(a).

2. In § 51.100, paragraphs (oo), (pp), (qq), (rr) and (ss) are added to read as follows:

§ 51.100 Definitions.

* * * * *

(oo) "Particulate matter" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

(pp) "Particulate matter emissions" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method, specified in this chapter, or by a test method specified in an approved State implementation plan.

(qq) "PM_{10}" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based

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on Appendix J of Part 50 of this chapter and designated in accordance with Part 53 of this chapter or by an equivalent method designated in accordance with Part 53 of this chapter.

(rr) "PM_{10} emissions" means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method, specified in this chapter or by a test method specified in an approved State implementation plan.

(ss) "Total suspended particulate" means particulate matter as measured by the method described in Appendix B of Part 50 of this chapter.

3. In § 51.151, the third unnumbered subdivision beginning "sulfur dioxide and particulate matter combined" is removed and the second unnumbered subdivision beginning "particulate matter" is revised to read as follows:

§ 51.151 Significant harm levels.

* * * * *

PM_{10}—600 micrograms/cubic meter; 24-hour average.

* * * * *

4. In § 51.165, the fourth entry in the list in paragraph (a)(1)(x) is removed and paragraph (b) is revised to read as follows:

§ 51.151 Permit requirements.

* * * * *

(b)(1) Each plan shall include a preconstruction review permit program or its equivalent to satisfy the requirements of section 110(a)(2)(D)(i) of the Act for any new major stationary source or major modification as defined in paragraphs (a)(1) (iv) and (v) of this section. Such a program shall apply to any such source or modification that would locate in any area designated as attainment or unclassifiable for any national ambient air quality standard pursuant to section 107 of the Act, when it would cause or contribute to a violation of any national ambient air quality standard.

(2) A major source or major modification will be considered to cause or contribute to a violation of a national ambient air quality standard when such source or modification would, at a minimum, exceed the following significance levels at any locality that does not or would not meet the applicable national standard:

Pollutant	Annual	Averaging time (hours)			
		24	8	3	1
SO_2	1.0 $\mu g/m^3$	5 $\mu g/m^3$		25 $\mu g/m^3$	
PM_{10}	1.0 $\mu g/m^3$	5 $\mu g/m^3$			
NO_2	1.0 $\mu g/m^3$				
CO			0.5 mg/m^3		2 mg/m^3

(3) Such a program may include a provision which allows a proposed major source or major modification subject to paragraph (b) of this section to reduce the impact of its emissions upon air quality by obtaining sufficient emission reductions to, at a minimum, compensate for its adverse ambient impact where the major source or major modification would otherwise cause or contribute to a violation of any national ambient air quality standard. The plan shall require that, in the absence of such emission reductions, the State or local agency shall deny the proposed construction.

(4) The requirements of paragraph (b) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment pursuant to section 107 of the Act.

5. In § 51.166, paragraph (a)(6)(i) is revised, the fourth entry in the list in paragraph (b)(23)(i) is revised, the entries under the headings "Particulate matter" in the tables in paragraphs (c) and (p)(4) are revised, paragraphs (i)(8)(i) (c), (f), (h), and (l) are revised, and new paragraph (i)(10) is added to read as follows:

§ 51.166 Prevention of significant deterioration of air quality.

(a) * * *

(6) * * *

(i) Any State required to revise its implementation plan by reason of an amendment to this section, including any amendment adopted simultaneously with this paragraph, shall adopt and submit such plan revision to the Administrator for approval within 9 months after the effective date of the new amendments.

* * * * *

(b) * * *

(23)(i) * * *

Particulate matter: 25 tpy of particulate matter emissions, 15 tpy of PM_{10} emissions.

* * * * *

(c) * * *

Pollutant	Maximum allowable increases (micrograms per cubic meter)
Class I	
Particulate matter:	
TSP, annual geometric mean	5
TSP, 24-hr maximum	10
* * * * *	
Class II	
Particulate matter:	
TSP, annual geometric mean	19
TSP, 24-hr maximum	37
* * * * *	*30
Class III	
Particulate matter:	
TSP, annual geometric mean	37
TSP, 24-hr maximum	75
* * * * *	

* * * * *

(i) * * *

(8) * * *

(i) * * *

(c) Particulate matter—10 $\mu g/m^3$ TSP, 24-hour average.—10 $\mu g/m^3$ PM_{10}, 24-hour average.

* * * * *

(f) Lead—0.1 $\mu g/m^3$, 3-month average.

* * * * *

(h) Beryllium—0.001 $\mu g/m^3$, 24-hour average:

* * * * *

(l) Hydrogen sulfide—0.2 $\mu g/m^3$, 1-hour average:

* * * * *

(10) If EPA approves a plan revision under § 51.166 as in effect before July 31, 1987, any subsequent revision which meets the requirements of this section may contain transition provisions which parallel the transition provisions of § 52.21 (i)(11)(i)(iii), and (m)(1) (vii) and (viii) of this chapter as in effect on that date, these provisions being related to monitoring requirements for particulate matter. Any such subsequent revision may not contain any transition provision which in the context of the revision would operate any less stringently than would its counterpart in § 52.21 of this chapter.

* * * * *

(p) * * *

(4) * * *

Pollutant	Maximum allowable increases (micrograms per cubic meter)
Particulate matter:	
TSP, annual geometric mean	19
TSP, 24-hr maximum	37

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Pollutant	Maximum allowable increases (micrograms per cubic meter)
* * * * *	

* * * * *

6. In § 51.322, paragraphs (a)(1) and (b)(1) are revised to read as follows:

§ 51.322 Sources subject to emissions reporting.

(a) * * *

(1) For particulate matter, PM_{10}, sulfur oxides, VOC and nitrogen oxides, any facility that actually emits a total of 90.7 metric tons (100 tons) per year or more of any one pollutant. For particulate matter emissions, the reporting requirement ends with the reporting of calendar year 1987 emissions. For PM_{10} emissions, the reporting requirement begins with the reporting of calendar year 1988 emissions.

* * * * *

(b) * * *

(1) For particulate matter, PM_{10}, sulfur oxides, VOC and nitrogen oxides. 22.7 metric tons (25 tons) per year or more. For particulate matter, the reporting requirement ends with the reporting of calendar year 1987 emissions. For PM_{10}, the reporting requirement begins with the reporting of calendar year 1988 emissions.

* * * * *

7. In § 51.323, paragraphs (a)(1) and (a)(2) are revised and paragraph (a)(3) is added to read as follows:

§ 51.323 Reportable emissions data and information.

(a) * * *

(1) Emissions of particulate matter, sulfur oxides, carbon monoxide, nitrogen oxides, and VOC as specified by AEROS Users Manual, Vol. II (EPA 450/2-76-029, OAQPS No. 1.2-039) to be coded into the National Emissions Data System point source coding form,

(2) Emissions of lead or lead compounds measured as elemental lead as specified by AEROS Users Manual, Vol. II (EPA 45/2-76-029, OAQPS No. 1.2-039) to be coded into the Hazardous and Trace Emissions System points source coding forms, and

(3) Emissions of PM_{10} as will be specified in a future guideline.

* * * * *

8. In Appendix L, paragraphs 1.1 (b), (c), and (d) are amended by removing the unnumbered subdivisions beginning "SO_2 and particulate combined" and by revising the unnumbered subdivisions beginning "Particulate" to read as follows:

Appendix L—[Amended]

APPENDIX L—EXAMPLE REGULATIONS FOR PREVENTION OF AIR POLLUTION EMERGENCY EPISODES

1.1 * * *

(b) * * *

PM_{10}—350 $\mu g/m^3$, 24-hour average.

(c) * * *

PM_{10}—420 $\mu g/m^3$, 24-hour average.

(d) * * *

PM_{10}—500 $\mu g/m^3$, 24-hour average.

* * * * *

Appendix S—[Amended]

9. In Appendix S, the fourth line beginning "Particulate matter" in the list in section 11.A.10(i) is amended by adding the words "of particulate matter emissions" after the words "25 tpy."

* * * * *

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

For the reasons set out in the preamble, Part 52 of Chapter I of Title 40 of the Code of Federal Regulations is amended as follows:

1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401-7642.

2. In § 52.21, the fourth item in the table in paragraph (b)(23)(i) is revised; the entries under the heading "Particulate matter" in the tables in paragraphs (c) and (p)(5) are revised; paragraphs (i)(4) (ix) and (x) are added; the third, sixth, eighth, and twelfth items in the list in paragraph (i)(8)(i) are revised; paragraph (i)(11), and paragraphs (m)(1)(vii) and (viii) are added; and paragraph (w)(2) is revised as follows:

§ 52.21 Prevention of significant deterioration of air quality.

* * * * *

(b) **Definitions.** * * *

(23)(i) * * *

Particulate matter: 25 tpy of particulate matter emissions; 15 tpy of PM_{10} emissions.

* * * * *

(c) * * *

Pollutant	Maximum allowable increases (micrograms per cubic meter)
Class I	
Particulate matter:	
TSP, annual geometric mean	5
TSP, 24-hr maximum	10
* * * * *	
Class II	
Particulate matter:	
TSP, annual geometric mean	19
TSP, 24-hr maximum	37
* * * * *	
Class III	
Particulate matter:	
TSP, annual geometric mean	37
TSP, 24-hr maximum	75
* * * * *	

* * * * *

(i) * * *

(4) * * *

(ix) The source or modification was not subject to § 52.21, with respect to particulate matter, as in effect before July 31, 1987, and the owner or operator:

(*a*) Obtained all final Federal, State, and local preconstruction approvals or permits necessary under the applicable State implementation plan before July 31, 1987.

(*b*) Commenced construction within 18 months after July 31, 1987, or any earlier time required under the State implementation plan: and

(*c*) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable period of time;

(x) The source or modification was subject to 40 CFR 52.21, with respect to particulate matter, as in effect before July 31, 1987 and the owner or operator submitted an application for a permit under this section before that date, and the Administrator subsequently determines that the application as submitted was complete with respect to the particulate matter requirements then in effect in this section. Instead, the requirements of paragraphs (j) through (r) of this section that were in effect before July 31, 1987 shall apply to such source or modification.

* * * * *

(8) * * *

(i) * * *

Particulate matter:

10 $\mu g/m^3$ of TSP, 24-hour average.

10 $\mu g/m^3$ of PM_{10}, 24-hour average:

* * * * *

Lead—0.1 $\mu g/m^3$, 3-month average;

* * * * *

Beryllium—0.001 $\mu g/m^3$, 24-hour average;

* * * * *

Hydrogen sulfide—0.2 $\mu g/m^3$, 1-hour average;

* * * * *

(11)(i) At the discretion of the Administrator, the requirements for air quality monitoring of PM_{10} in paragraphs (m)(1)(i)–(iv) of this section may not apply to a particular source or modification when the owner or operator of the source or modification submits an application for a permit under this section on or before June 1, 1988 and the Administrator subsequently determines that the application as submitted before that date was complete, except with respect to the requirements for monitoring particulate matter in paragraphs (m)(1)(i)–(iv).

(ii) The requirements for air quality monitoring of PM_{10} in paragraphs (m)(1)(iii) and (iv) and (m)(3) of this section shall apply to a particular source or modification if the owner or operator of the source or modification submits an application for a permit under this section after June 1, 1988 and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988 to the date the application becomes otherwise complete in accordance with the provisions set forth under paragraph (m)(1)(viii) of this section, except that if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that paragraph (m)(1)(iii) requires shall have been gathered over that shorter period.

* * * * *

(m) *Air quality analysis.*

(1) * * *

(vii) For any application that becomes complete, except as to the requirements of paragraph (m)(1)(iii) and (iv) pertaining to PM_{10}, after December 1, 1988 and no later than August 1, 1988 the data that paragraph (m)(1)(iii) requires shall nave been gathered over at least the period from August 1, 1988 to the date the application becomes otherwise complete, except that if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that paragraph (m)(1)(iii) requires shall have been gathered over that shorter period.

(viii) With respect to any requirements for air quality monitoring of PM_{10} under paragraphs (i)(11)(i) and (ii) of this section, the owner or operator of the source or modification shall use a monitoring method approved by the Administrator and shall estimate the ambient concentrations of PM_{10} using the data collected by such approved monitoring method in accordance with estimating procedures approved by the Administrator.

* * * * *

(p) * * *

(5) * * *

Pollutant	Maximum allowable increases (micrograms per cubic meter)
Particulate matter:	
TSP, annual geometric mean	19
TSP 24-hr maximum	37

* * * * *

(w) *Permit rescission.* * * *

(2) Any owner or operator of a stationary source or modification who holds a permit for the source or modification which was issued under § 52.21 as in effect on July 30, 1987, or any earlier version of this section, may request that the Administrator rescind the permit or a particular portion of the permit.

* * * * *

§ 52.24 [Amended]

3. In § 52.24, paragraph (f)(10) is amended by removing the fourth entry, beginning "Particulate matter," from the list of significant emission rates.

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APPENDIX B

OVERVIEW OF CLEAN AIR ACT AUTHORITY FOR INSPECTORS

APPENDIX B

OVERVIEW OF CLEAN AIR ACT AUTHORITY FOR INSPECTORS

The Clean Air Act (CAA) authorizes plant entry for the purposes of inspection. In specific, Section 114 of the Act states:[1]

> ".....the Administrator or his authorized representative, upon presentation of his credentials shall have a right of entry to, upon or through any premises of such person or in which any records required to be maintained.....are located, and may at reasonable times have access to and copy any records, inspect any monitoring equipment or methods....., and sample any emissions which such person is required to sample....."

Inspections conducted under Section 114 extend to all items relating to compliance with the requirements of the CAA which are within the premises being inspected. These may include: records filed, processes, monitoring equipment, controls, sampling methods, and emissions.

Much of the compliance monitoring, including on-site inspections, is accomplished at the state level. Section 114 of the Act provides for the extension of federal authority to the states to carry out that Section. Where a state has been delegated Section 114 authority from EPA, the same authority EPA has to monitor, sample, inspect or copy records, and any other authority under Section 114 can, in like manner, be exercised by the state. No representative of EPA need accompany the state officials.

EPA does not always have the resources available to conduct all of the compliance monitoring functions on its own. To accomplish these functions, EPA frequently hires private contractors to provide technical support for on-site inspections and sampling. EPA maintains that such contractors, upon proper designation, are "authorized representatives" of the administrator within the meaning of Section 114. However, the courts have not unanimously upheld EPA's position. For this reason, EPA has adopted a policy that duly-authorized contractors are only used to conduct on-site inspections in those Circuits where Court of Appeals decisions have not been against the use of contractors as authorized representatives.

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[1] U. S. Environmental Protection Agency. *The Clean Air Act, Compliance/ Enforcement Guidance Manual.* Office of Enforcement and Compliance Monitoring. Washington, DC. 1987.

EPA's current policy on the use of contractors to conduct on-site inspections is as follows:[2]

- First, Second, Third, Fourth, Fifth, Seventh, Eighth, Eleventh, and District of Columbia Circuits. Authorized contractors may be designated to provide technical support for inspections of facilities owned by anyone other than Stauffer Chemical Company.

- Ninth Circuit. Authorized contractors may be designated to provide technical support for any inspections.

- Sixth and Tenth Circuits. Absent express permission from Headquarters, authorized contractors should not be designated to provide technical support for any inspections.

EPA also has the authority to conduct unannounced, off-the-premises inspections, such as visible emission observations.

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[2] U.S. Environmental Protection Agency. *Air Compliance Inspection Manual*. EPA-340/1-86-200. Office of Air Quality Planning and Standards. Research Triangle Park, NC. September 1985.

APPENDIX C

INSPECTORS RESPONSIBILITIES, SAFETY PROCEDURES, AND PREPARATION

APPENDIX C

INSPECTORS RESPONSIBILITIES, SAFETY PROCEDURES, AND PREPARATION

C.1 INSPECTOR RESPONSIBILITIES

The primary role of the inspector is to gather information needed in the determination of compliance with applicable regulations and other enforcement activities. Closely coupled with these functions are certain responsibilities which include: (1) knowing and abiding by the legal requirements of the inspection; (2) using proper procedures for effective inspection and evidence collection; (3) practicing accepted safety procedures; (4) observing the professional and ethical responsibilities; and (5) maintaining certain quality assurance standards. Each is briefly outlined below.

C.1.1 Legal Responsibilities

It is essential that all inspection activities be conducted within the legal framework established by the Clean Air Act (CAA) or other applicable statutes. In particular, this includes:

- Proper handling of confidential business information.
- Presentation of proper credentials and plant entry at reasonable times.
- Protection of the legal rights of the company and its personnel under the U.S. Constitution.
- Knowledge of all applicable statutes, regulations, and permit conditions.
- Use of notice(s) and receipts, if appropriate.

For federal employees (or their representatives) conducting inspections under the CAA, the guidance provided in Reference 1 should be followed. In the case of state and local inspectors, the appropriate office responsible for legal matters should be consulted regarding the above issues.

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[1] U.S. Environmental Protection Agency. *The Clean Air Act, Compliance/Enforcement Guidance Manual*. Office of Enforcement and Compliance Monitoring. Washington, DC. 1987.

C.1.2 Procedural Responsibilities

The inspector must be familiar with and adhere to, when possible, all general inspection procedures and evidence gathering techniques. This will ensure accurate inspections and avoid the possibility of endangering a legal proceeding on procedural grounds.

- Inspection procedures--Inspectors should observe standard procedures for conducting each portion of the inspection as established by the regulatory agency, when possible. All deviations should be clearly documented.

- Evidence collection--Inspectors must be familiar with general evidence gathering techniques. Because the agency's case in a civil or criminal prosecution depends on the evidence gathered by the inspector, it is imperative that the inspector keep detailed records of each inspection. These records will serve as an aid in preparing the inspection report, in determining the appropriate enforcement response, and in giving testimony in an enforcement case, as required. Specifically, inspectors must:

  - Know how to substantiate facts with items of evidence, including samples, photographs, document copies, statements from persons, and personal observations.

  - Know how to detect lack of good faith during interviews with company personnel.

  - Be familiar with all applicable regulations and permit conditions and know what type of information is required to determine compliance with each.

  - Be able to evaluate what documentation is necessary (routine inspection).

  - Collect evidence in a manner that will be incontestable in legal proceedings.

  - Be able to write clear, informative inspection reports.

  - Know how to testify in court and at administrative hearings.

C.1.3 Safety Responsibilities

The inspection of industrial facilities generally involves potential exposure to numerous hazards. The inspector must at all times avoid putting anyone at unnecessary risk. To accomplish this, it is the inspector's responsibility to:

- Know and observe all plant safety requirements, warning signals, and emergency procedures.
- Know and observe all agency safety requirements, procedures, and policies.
- Remain current in safety practices and procedures by regular participation in safety training.
- Use any safety equipment required by the facility being inspected in addition to that required by the regulatory agency.
- Use safety equipment in accordance with agency guidance and labeling instructions.
- Maintain safety equipment in good condition and proper working order.
- Dress appropriately for each inspection activity, including protective clothing, if appropriate.

Section 2.7 of this manual (and listed references) address inspection safety procedures in more detail.

C.1.4 Professional and Ethical Responsibilities

As professionals, inspectors are expected to perform their duties with the highest degree of honesty and professionalism. Procedures and requirements ensuring ethical actions have been worked out through many years of governmental inspection activities. These procedures and standards of conduct have evolved for the protection of the individual, the regulatory agency, and industry. The inspector is constantly in a position to set an example for private industry and to encourage concern for the health and safety in environment and compliance with the laws that protect them.

Specifically, the EPA inspector should always consider and observe the following responsibilities:

- U.S. Constitution--All investigations are to be conducted within the framework of the United States Constitution and with due regard for individual rights regardless of race, sex, creed, or national origin.
- EPA employee conduct--Inspectors are to conduct themselves at all times in accordance with the regulations prescribing EPA Employee Responsibilities and Conduct, codified in 40 CFR Part 60, Part 3.
- Objectivity--The facts of an investigation are to be developed and reported completely, accurately, and objectively. In the course of an investigation, any act or failure to act motivated by reason of private gain is illegal. Actions which could be construed as such should be scrupulously avoided.

- Knowledge--A continuing effort to improve professional knowledge and technical skill in the investigative field should be made. The inspector should keep abreast of changes in the field of air pollution, including current regulations, EPA and other agency policies, control technology, methodology, and safety considerations.

- Professional attitude--The inspector is a representative of EPA and is often the initial or only contact between the agency and industry. In dealing with facility representatives and employees, inspectors must be dignified, tactful, courteous, and diplomatic. They should be especially careful not to infringe on union/company agreements. A firm but responsive attitude will help to establish an atmosphere of cooperation and should foster good working relations. He should always strive to obtain the respect of, inspire confidence in, and maintain good will with industry and the public.

- Attire--Inspectors should dress appropriately, including wearing protective clothing or equipment, for the activity in which they are engaged.

- Industry, public, and consumer relations--All information acquired in the course of an inspector's duties is for official use only. Inspectors should not speak of any product, manufacturer, or person in a derogatory manner.

- Gifts, favors, luncheons--Inspectors should not accept favors or benefits under circumstances that might be construed as influencing the performance of governmental duties. EPA regulations provide an exemption whereby an inspector could accept food and refreshment of nominal value on infrequent occasions in the ordinary course of a luncheon or dinner meeting or other meeting, or during an inspection tour. Inspectors should use this exemption only when absolutely necessary.

- Requests for information--EPA has an "open door" policy on releasing information to the public. This policy aims at making information about EPA and its work freely and equally available to all interested individuals, groups, and organizations. In fact, EPA employees have both a legal and traditional responsibility for making useful educational and safety information available to the public. This policy, however, does not extend to information relating to the suspicion of a violation, evidence of possible misconduct, or confidential business information.

C.1.5 Quality Assurance Responsibilities

The inspector assumes primary responsibility for ensuring the quality of data generated as a result of the inspection. Thus quality assurance procedures appropriate to the type of data being generated should be adhered to. In general, quality assurance procedures are developed towards the following elements: valid data collection; approved, standard methods; control of service, equipment, supplies; quality analytical techniques; and standard data

handling and reporting. Reference 2 should be consulted for general guidance in this regard.

C.2 PREINSPECTION PREPARATION

Preinspection preparation is always necessary to ensure effective use of the inspector's and facility's time, and to ensure that the inspection is properly focused on collecting relevant data and information. This preparation involves: review of facility background; development of an inspection plan; notifications; and equipment preparation. Each is discussed briefly below.

C.2.1 Review of Facility Background

A review of the available background information on the facility to be inspected is essential to the overall success of the inspection. The review should enable the inspector to: become familiar with the facility's process and emission characteristics; conduct the inspection in a timely manner; minimize inconvenience to the facility by not requesting unnecessary data such as that previously provided to the EPA or another agency; conduct an efficient, but thorough, inspection; clarify technical and legal issues before entry; and prepare a useful inspection report. The following types of information should be reviewed:

* Basic facility information--Names, titles, and phone numbers of facility representatives; maps showing facility location and geographic relationship to residences, etc., potentially impacted by emissions; process and production information; plot plans or maps identifying sources, control equipment and methods, monitors, and other points of interest; and safety equipment requirements.

* Sources and control equipment data--Sources and extent of fugitive emissions; description and operational data for control equipment; and previous inspection checklists (and reports).

* Regulations, requirements, and limitations--Most recent permits for facility sources; applicable federal, state, and local regulations and requirements; special exemptions and waivers, if any; and permitted operating conditions.

* Facility compliance and enforcement history--Previous inspection reports; complaint history including reports, follow-up, findings, remedial action; past conditions of noncompliance; previous enforcement actions; pending enforcement actions, compliance schedules and/or variances; and control performance data and reports.

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[2] U.S. Environmental Protection Agency. *Air Compliance Inspection Manual.* EPA-340/1-85-020. Office of Air Quality Planning and Standards. Research Triangle Park, NC. September 1985.

The following sources are recommended for obtaining this background information for EPA inspectors:

- Inspectors "working" file--The inspector's own concise file for a facility containing basic plant and process information, maps, dust control plan, chronology of enforcement related actions, recent permits, and safety requirements.

- Regional office files and data bases--These files should include much of the information needed including inspection reports, permits and permit applications, compliance and enforcement history, exemption or waiver information, and control performance monitoring data.

- State/local files and contacts--These should be used to supplement and update the information available in the regional office files.

- Laws and regulations--The Clean Air Act and related regulations establish emission standards, controls, procedures, and other requirements applicable to a facility. State and local laws and regulations should also be considered.

- Technical reports, documents, and guidelines--These can often be valuable in providing information and/or guidance concerning specific processes, control techniques, performance advantages and limitations of particular types of controls, and specific inspection procedures. Table 2-3 lists some of the reference documents available for fugitive sources.

C.2.2 Inspection Plan Development

Based on the review of the facility background information and the intended purpose of the inspection, the EPA inspector should develop an inspection plan. This plan should address the following items:

- Inspection objectives--Identify the precise purpose of the inspection in terms of what it will accomplish.

- Tasks--Decide on specific tasks to accomplish the inspection objectives including the exact information which must be collected.

- Procedures--Determine the procedures to be used in completing the tasks, particularly special or unfamiliar procedures.

- Resources--Determine what equipment and personnel will be required.

- Schedule--Estimate the time requirements for the inspection; determine a reasonable time for the inspection (when plant is operating at representative conditions).

C.2.3 Facility Notification

EPA regional offices vary in their exact policies concerning giving a facility advance notification of an inspection. In an EPA policy memo entitled "Final Guidance on Use of Unannounced Inspections," the Stationary Source Compliance Division recommends that all regional inspection programs incorporate unannounced inspections as part of their overall inspection approach.[2] The advantages of the unannounced inspection are: (1) the opportunity to observe the source under normal operating conditions (since the source does not have time to prepare for the inspection); (2) detection of visible emissions and O&M-type problems and violations; (3) creation of an increased level of attention by a source to its compliance status; and (4) projection of a serious attitude toward surveillance by the agency.

The potential negative aspects of performing unannounced inspections are: (1) the source may not be operating or key plant personnel may not be available; and (2) there could be an adverse impact on EPA/state or EPA/source relations. However, it has been demonstrated by the regional offices who already use the unannounced inspections that, in the majority of cases, these drawbacks can be overcome.[2]

When using the unannounced inspection, an alternative to arriving at the source totally unannounced is to contact the source shortly before the scheduled inspection time. This is left to the discretion of the regional office and/or the inspector and must be done so as not to alter the representativeness of the source operation. The amount of advanced notice given should be noted in the inspection report.

Announced inspections are performed by EPA (and its authorized representatives) when some specific purpose is served by providing such notice. Situations where announced inspections are appropriate are:

- When specific information is being sought which must be prepared by the source, or where the source must make significant accommodations for the inspector to gather the information.
- When the assistance of specific plant personnel is necessary for the successful performance of the inspections (i.e., the information they provide cannot be obtained from other on-duty plant personnel or by a follow-up information request).
- When inspecting the government facilities or sources operating under government contract where entry is restricted due to classified operations.
- When inspecting unmanned or extremely remote sources.

When the inspection is announced in advance, a lead time of five working days is generally appropriate. Notification may be by telephone or letter and it may or may not include the exact date and time of the inspection. Instances where written notification (instead or oral) is appropriate are:

- When requested by the state/local agency or by the source.
- When extensive or specific records are being sought.
- When the inspection is to be performed solely by an EPA contractor.
- When inspecting government facilities with classified operations or otherwise restricted entry.
- Special-purpose inspections (e.g., to establish conditions for a source-specific SIP revision).

A "114 Letter" (Appendix A) is sometimes used for notification if there is a need to request facility information prior to the inspection. The facility representative notified should have the authority to release data and samples and to arrange for access. In addition, when notifying a facility on an inspection, information should be requested in regard to on-site safety regulations. This will avoid problems concerning safety equipment at the time of the inspection.

APPENDIX D

SUMMARY OF STATE METHODS FOR DETERMINING VISIBLE EMISSIONS FROM OPEN DUST SOURCES

APPENDIX D

SUMMARY OF STATE METHODS FOR DETERMINING VISIBLE EMISSIONS FROM OPEN DUST SOURCES

Visible emission methods have been adopted by a number of states as a tool for compliance. Although opacity observations at the property line have commonly been employed in earlier fugitive dust control regulations, recent court decisions in Colorado and Alabama have found that rules of that type are unconstitutional (failing to provide equal protection). It is strongly recommended that property-line opacity observations serve only as an indicator of a potential problem, thus "triggering" further investigation. Source-specific opacity determinations, on the other hand, have long been a court-tested approach to regulation. The following sections describes two states' approach to fugitive dust regulation using visible emission methods.

D.1 TENNESSEE VISIBLE EMISSION METHOD

The State of Tennessee has developed a method (TVEE Method 1) for evaluating visible emissions (VE) from roads and parking lots. The following discussion focuses on TVEE Method 1 (M1) in the technical areas: (1) reader position/techniques, and (2) data reduction/evaluation procedures. Table D-1 summarizes the relevant features of TVEE M1.

D.1.1 Reader Position/Techniques

As indicated in Table D-1, TVEE M1 specifies an observer location of 15 ft from the source. In most cases, this distance should allow an unobstructed view, and at the same time meet observer safety requirements.

M1 also specifies that the plume be read at ~ 4 ft directly above the emitting surface. This specification presumably results from field experiments conducted to support the method. It is probably intended to represent the point (i.e., location) of maximum opacity. While there is no quantitative supporting evidence, it seems likely that the height and location of maximum opacity relative to a passing vehicle will vary depending upon ambient factors (wind speed and direction) as well as vehicle type and speed.

Implied in the M1 specification that the plume be read ~ 4 ft above the emitting surface, is the fact that observations will be made against a terrestrial (vegetation) background. The results of one study using a conventional smoke generator modified to emit horizontal plumes, indicated that under these conditions observers are likely to underestimate opacity levels. More specifically, the study found that as opacity levels increased, opacity

TABLE D-1. SUMMARY OF TVEE M1 REQUIREMENTS

Reader position/techniques

- Sun in 140 degree sector behind the reader
- Observer position ~ 15 ft from source
- Observer line of sight should be as perpendicular as possible to both plume and wind direction
- Only one plume thickness read
- Plume read at ~ 4 ft directly above emitting surface
- Individual opacity readings taken each 15 s, recorded to nearest 5% opacity
- Readings terminated if vehicle obstructs line of sight
- Readings terminated if vehicles passing in opposite direction create intermixed plume

Data reduction

- 2-min time-averages consisting of eight consecutive 15 s readings

Certification

- Per Tennessee requirements

readings showed an increasing negative bias. For example, at 15% opacity, the observers underestimated opacity by about 5%, and at 40% opacity, observations averaged about 11% low.[1] Black plumes were underestimated at all opacity levels.

M1 specifies that only one plume thickness be read. It includes qualifying provisions that: (1) readings terminate if vehicles passing in opposite directions create an intermixed plume; but (2) readings continue if intermixing occurs as a result of vehicles moving in the same direction. Unlike (1), the latter condition is considered representative of the surface. The intent here is probably to minimize the influence of increasing plume density which results from "overlaying" multiple plumes.

D.1.2 Data Reduction/Evaluation Procedures

There are two basic approaches that can be used to reduce opacity readings for comparison with VE regulations. One approach involves the time-averaging of consecutive 15-s observations over a specified time period to produce an average opacity value.

In the development of M1, the State of Tennessee concluded that a short averaging period--2 min (i.e., eight consecutive 15-s readings) was appropriate for roads and parking lots, as these sources typically produce brief, intermittent opacity peaks.

Although not specified in M1, VE from open sources could be evaluated using time-aggregating techniques. For example, the discrete 15-s readings could be employed in the time-aggregating framework. In this case, the individual observations are complied into a histogram from which the number of observations (or equivalent percent of observation time) in excess of the desired opacity may then be ascertained. The principal advantage of using the time-aggregate technique as a method to reduce VE readings is that the resultant indicator of opacity conditions is then compatible with regulations that include a time exemption clause. Under time exemption standards, a source is permitted opacity in excess of the standard for a specified fraction of the time (e.g., 3 min/h). The concept of time exemption was originally developed to accommodate stationary source combustion processes.

Without more detailed supporting information, it is difficult to determine which of the two approaches is most appropriate for evaluating VE from open sources. With respect to time-averaging, statistics of observer bias in reading plumes from a smoke generator do indicate at least a slight decrease in the "accuracy" of the mean observed opacity value as averaging time decreases. In M1 (2-min average), this is reflected in the inclusion of an 8.8% buffer for observational error. This buffer is taken into account before issuing a Notice of Violation.[2]

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[1] Rose, T. H. Evaluation of Trained Visible Emission Observers for Fugitive Opacity Measurement. EPA-60/3-84-093, U.S. Environmental Protection Agency, Research Triangle Park, NC. October 1984.

[2] Telecon. Englehart, P., Midwest Research Institute, with J. Walton, Tennessee Division of Air Pollution Control. Nashville, Tennessee. September 1984.

One potential problem with applying time-averaging to opacity from roads and parking lots, is that the resulting average will be sensitive to variations in source activity. For example, interpreting one conclusion offered in support of M1, it is likely that under moderate wind conditions a single vehicle pass will produce only two opacity readings $\geq$ 5%.[2] Averaging these with six zero (0) readings yields a 2-min value below any reasonable opacity standard. Yet, under the same conditions with two or more vehicle passes, the average value will suggest elevated opacity levels. While there is no information available on the use of time aggregation for open source opacity, it appears that this approach would more easily accommodate variations in level of source activity. For this reason alone, it may be the evaluation approach better suited to roads and parking lots.

D.2 OHIO DRAFT RULE 3745-17-(03)(B)

The State of Ohio submitted a fugitive dust visible emission measurement technique which the EPA proposed to approve in the *Federal Register* on January 2, 1987. Unlike the Tennessee method, the Ohio draft rule contains provisions for sources other than roads and parking lots. Average opacity values are based on 12 consecutive readings. Table D-2 summarizes the Ohio method; as can be seen from the table, many features of the Ohio draft rule are similar to TVEE M1. Consequently, the remarks made earlier in this section are equally applicable here.

TABLE D-2. SUMMARY OF OHIO DRAFT RULE 3745-17-(03)(B)

Reader position/techniques

- Roadways and parking lots:
  - * Line of vision approximately perpendicular to plume direction
  - * Plume read at ~ 4 ft above surface
  - * Readings suspended if vehicle obstructs line of sight; subsequent readings considered consecutive to that taken before the obstruction
  - * Readings suspended if vehicles passing in opposite direction create an intermixed plume; subsequent readings considered consecutive to that taken before intermixing
  - * If unusual condition (e.g., spill) occurs, another set of readings must be conducted

- All other sources:
  - * Sun behind observer
  - * Minimum of 15 ft from source
  - * Line of sight approximately perpendicular to flow of fugitive dust and to longer axis of the emissions
  - * Opacity observed for point of highest opacity

APPENDIX E

EPA REFERENCE METHOD 22 FOR VISUAL DETERMINATION OF FUGITIVE EMISSIONS

APPENDIX E

EPA REFERENCE METHOD 22 FOR VISUAL DETERMINATION OF FUGITIVE EMISSIONS

The following pages outline EPA Reference Test Method 22 for the visual determination of fugitive emissions from material sources and smoke emissions from flares.

METHOD 22—VISUAL DETERMINATION OF FUGITIVE EMISSIONS FROM MATERIAL SOURCES AND SMOKE EMISSIONS FROM FLARES

1. *Introduction*

This method involves the visual determination of fugitive emissions, i.e., emissions not emitted directly from a process stack or duct. Fugitive emissions include emissions that (1) escape capture by process equipment exhaust hoods; (2) are emitted during material transfer; (3) are emitted from buildings housing material processing or handling equipment; and (4) are emitted directly from process equipment. This method is used also to determine visible smoke emissions from flares used for combustion of waste process materials.

This method determines the amount of time that any visible emissions occur during the observation period, i.e., the accumulated emission time. This method does not require that the opacity of emissions be determined. Since this procedure requires only the determination of whether a visible emission occurs and does not require the determination of opacity levels, observer certification according to the procedures of Method 9 are not required. However, it is necessary that the observer is educated on the general procedures for determining the presence of visible emissions. As a minimum, the observer must be trained and knowledgeable regarding the effects on the visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor). This training is to be obtained from written materials found in References 7.1 and 7.2 or from the lecture portion of the Method 9 certification course.

2. *Applicability and Principle*

2.1 Applicability. This method applies to the determination of the frequency of fugitive emissions from stationary sources (located indoors or outdoors) when specified as the test method for determining compliance with new source performance standards.

This method also is applicable for the determination of the frequency of visible smoke emissions from flares.

2.2 Principle. Fugitive emissions produced during material processing, handling, and transfer operations or smoke emissions from flares are visually determined by an observer without the aid of instruments.

3. *Definitions*

3.1 Emission Frequency. Percentage of time that emissions are visible during the observation period.

3.2 Emission Time. Accumulated amount of time that emissions are visible during the observation period.

3.3 Fugitive Emissions. Pollutant generated by an affected facility which is not collected by a capture system and is released to the atmosphere.

3.4 Smoke Emissions. Pollutant generated by combustion in a flare and occurring immediately downstream of the flame. Smoke occurring within the flame, but not downstream of the flame, is not considered a smoke emission.

3.5 Observation Period. Accumulated time period during which observations are conducted, not to be less than the period specified in the applicable regulation.

4. *Equipment*

4.1 Stopwatches. Accumulative type with unit divisions of at least 0.5 seconds; two required.

4.2 Light Meter. Light meter capable of measuring illuminance in the 50- to 200-lux range; required for indoor observations only.

5. *Procedure*

5.1 Position. Survey the affected facility or building or structure housing the process to be observed and determine the locations of potential emissions. If the affected facility is located inside a building, determine an observation location that is consistent with the requirements of the applicable regulation (i.e., outside observation of emissions escaping the building/structure or inside observation of emissions directly emitted from the affected facility process unit). Then select a position that enables a clear view of the potential emission point(s) of the affected facility or of the building or structure housing the affected facility, as appropriate for the applicable subpart. A position at least 15 feet, but not more than 0.25 miles, from the emission source is recommended. For outdoor locations, select a position where the sun is not directly in the observer's eyes.

5.2 Field Records.

5.2.1 Outdoor Location. Record the following information on the field data sheet (Figure 22-1): company name, industry, process unit, observer's name, observer's affiliation, and date. Record also the estimated wind speed, wind direction, and sky condition. Sketch the process unit being observed and note the observer location relative to the source and the sun. Indicate the potential and actual emission points on the sketch.

5.2.2 Indoor Location. Record the following information on the field data sheet (Figure 22-2): company name, industry, process unit, observer's name, observer's af-

filiation, and date. Record as appropriate the type, location, and intensity of lighting on the data sheet. Sketch the process unit being observed and note observer location relative to the source. Indicate the potential and actual fugitive emission points on the sketch.

5.3 Indoor Lighting Requirements. For indoor locations, use a light meter to measure the level of illumination at a location as close to the emission source(s) as is feasible. An illumination of greater than 100 lux (10 foot candles) is considered necessary for proper application of this method.

5.4 Observations. Record the clock time when observations begin. Use one stopwatch to monitor the duration of the observation period; start this stopwatch when the observation period begins. If the observation period is divided into two or more segments by process shutdowns or observer rest breaks, stop the stopwatch when a break begins and restart it without resetting when the break ends. Stop the stopwatch at the end of the observation period. The accumulated time indicated by this stopwatch is the duration of the observation period. When the observation period is completed, record the clock time.

During the observation period, continously watch the emission source. Upon observing an emission (condensed water vapor is not considered an emission), start the second accumulative stopwatch; stop the watch when the emission stops. Continue this procedure for the entire observation period. The accumulated elapsed time on this stopwatch is the total time emissions were visible during the observation period, i.e., the emission time.

5.4.1 Observation Period. Choose an observation period of sufficient length to meet the requirements for determining compliance with the emission regulation in the applicable subpart. When the length of the observation period is specifically stated in the applicable subpart, it may not be necessary to observe the source for this entire period if the emission time required to indicate noncompliance (based on the specified observation period) is observed in a shorter time period. In other words, if the regulation prohibits emissions for more than 6 minutes in any hour, then observations may (optional) be stopped after an emission time of 6 minutes is exceeded. Similarly, when the regulation is expressed as an emission frequency and the regulation prohibits emissions for greater than 10 percent of the time in any hour, then observations may (optional) be terminated after 6 minutes of emissions are observed since 6 minutes is 10 percent of an hour. In any case, the observation period shall not be less than 6 minutes in duration. In some cases, the process operation may be intermittent or cyclic. In such cases, it may be convenient for the observation period to coincide with the length of the process cycle.

5.4.2 Observer Rest Breaks. Do not observe emissions continuously for a period of more than 15 to 20 minutes without taking a rest break. For sources requiring observation periods of greater than 20 minutes, the observer shall take a break of not less than 5 minutes and not more than 10 minutes after every 15 to 20 minutes of observation. If continuous observations are desired for extended time periods, two observers can alternate between making observations and taking breaks.

5.4.3 Visual Interference. Occasionally, fugitive emissions from sources other than the affected facility (e.g., road dust) may prevent a clear view of the affected facility. This may particularly be a problem during periods of high wind. If the view of the potential emission points is obscured to such a degree that the observer questions the validity of continuing observations, then the observations are terminated, and the observer clearly notes this fact on the data form.

5.5 Recording Observations. Record the accumulated time of the observation period on the data sheet as the observation period duration. Record the accumulated time emissions were observed on the data sheet as the emission time. Record the clock time the observation period began and ended, as well as the clock time any observer breaks began and ended.

6. *Calculations*

If the applicable subpart requires that the emission rate be expressed as an emission frequency (in percent), determine this value as follows: Divide the accumulated emission time (in seconds) by the duration of the observation period (in seconds) or by any minimum observation period required in the applicable subpart, if the acutal observation period is less than the required period and multiply this quotient by 100.

7. *References.*

7.1 Missan, Robert and Arnold Stein. Guidelines for Evaluation of Visible Emissions Certification, Field Procedures, Legal Aspects, and Background Material. EPA Publication No. EPA-340/1-75-007. April 1975

7.2 Wohlschlegel, P. and D. E. Wagoner. Guideline for Development of a Quality Assurance Program: Volume IX—Visual Determination of Opacity Emissions From Stationary Sources. EPA Publication No. EPA-650/4-74-005-i. November 1975.

FUGITIVE OR SMOKE EMISSION INSPECTION
OUTDOOR LOCATION

Company _____	Observer _____
Location _____	Affiliation _____
Company representative _____	Date _____
Sky Conditions _____	Wind direction _____
Precipitation _____	Wind speed _____
Industry _____	Process unit _____

Sketch process unit; indicate observer position relative to source and sun; indicate potential emission points and/or actual emission points.

OBSERVATIONS

	Clock time	Observation period duration, min:sec	Accumulated emission time, min:sec
Begin Observation	_____		
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
End observation	_____		

Figure 22-1

Fugitive Emission Inspection Indoor Location Table

FUGITIVE EMISSION INSPECTION
INDOOR LOCATION

Company _____ Observer _____

Location _____ Affiliation _____

Company Representative _____ Date _____

Industry _____ Process unit _____

Light type (fluorescent, incandescent, natural _____

Light location (overhead, behind observer, etc.) _____

Illuminance (lux or footcandles) _____

Sketch process unit; indicate observer position relative to source; indicate potential emission points and/or actual emission points.

OBSERVATIONS	Clock time	Observation period duration, min:sec	Accumulated emission, time, min:sec
Beginning observation	_____		
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
End observation	_____		

Figure 22-2

APPENDIX F

MATERIAL SAMPLING AND ANALYSIS PROCEDURES

APPENDIX F

MATERIAL SAMPLING AND ANALYSIS PROCEDURES

F.1 SAMPLING TECHNIQUES

The following are recommended procedures for collection of appropriate road surface and aggregate material samples. Where practical, the recommended procedure is structured identically to the standard method published by the American Society of Testing and Materials (ASTM).

F.1.1 Unpaved Roads

The main objective in sampling the surface material from an unpaved road is to collect a minimum gross sample of 23 kg (50 lb) for every 4.8 km (3 mi) of unpaved road. However, for unpaved road segments significantly < 4.8 km (3 mi) found in industrial facilities, a traverse strip ~ 20 to 60 cm wide across the travel lanes every 0.8 km (1/2 mi) is usually adequate. For unpaved roads treated with a chemical dust suppressant, the sampling strips will typically be wider (~ 45 to 125 cm) in order to collect adequate sample mass. Where possible, incremental samples taken from unpaved roads should ideally be distributed over the road segment, as shown in Figure F-1. In these cases at least four incremental samples should be collected and composited to form the gross sample.

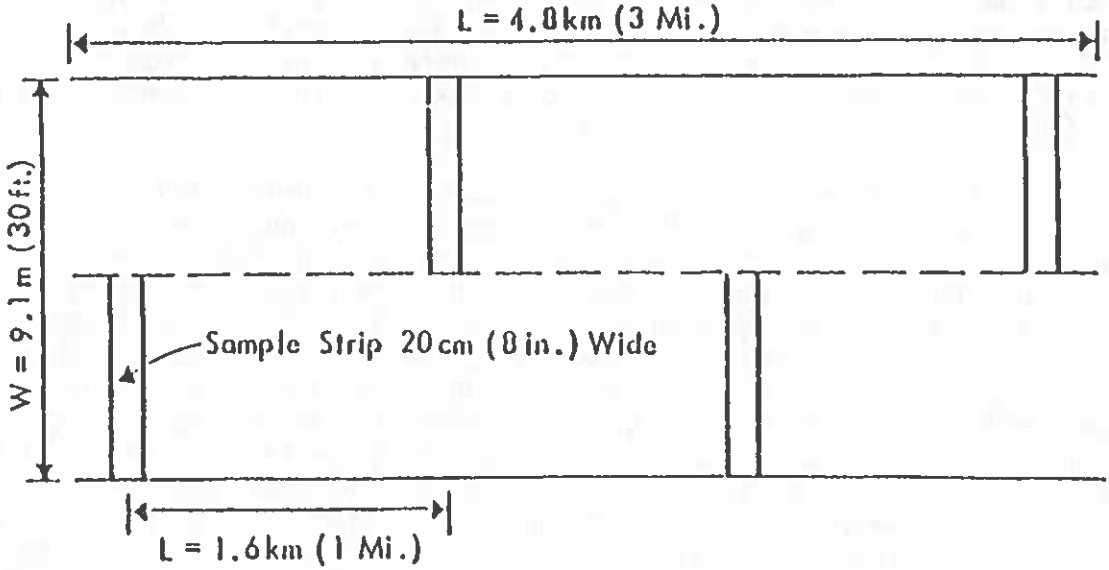


Figure F-1. Location of incremental sampling sites on an unpaved road.

To collect each sample, loose surface material is removed from the hard road base with a whisk broom and dustpan. The material should be swept carefully so that the fine dust is not injected into the atmosphere. The hard road base below the loose surface material should not be abraded so as to generate more fine material than exists on the road in its normal state. Figure F-2 presents a data form to be used for the sampling of unpaved roads. Figure F-3 shows the use of a dust pan and broom for unpaved road sampling as well as a sample strip across the road.

F.1.2 Paved Roads

Ideally, for a given paved road, one gross sample per every 8 km (5 mi) of paved roads should be collected. For industrial roads, one gross sample should be obtained for each road segment in the plant. The gross sample should consist of at least two separate increments per travel lane or each 0.8-km (0.5-mi) of road length should have a separate sample.

Figure F-4 presents a diagram showing the location of incremental samples for a four-lane road. Each incremental sample should consist of a lateral strip 0.3 to 3 m (1 to 10 ft) in width across a travel lane. The exact width is dependent on the amount of loose surface material on the paved roadway. For a visually dirty road, a width of 0.3 m (1 ft) is sufficient; but for a visually clean road, a width of 3 m (10 ft) is needed to obtain an adequate sample.

The above sampling procedure may be considered as the preferred method of collecting surface dust from paved roadways. In many instances, however, the collection of eight sample increments may not be feasible because of manpower, equipment, and traffic/hazard limitations. As an alternative method, samples can be obtained from a single strip across all travel lanes. When it is necessary to resort to this sampling strategy, care must be taken to select sites that have dust loading and traffic characteristics typical of the entire roadway segment of interest. In this situation, sampling from a strip 3 to 9 m (10 to 30 ft) in width is suggested, where possible. From this width, sufficient sample can be collected and a step toward representativeness in sample acquisition will be accomplished.

Samples are removed from the road surface by vacuuming, preceded by broom sweeping if large aggregate is present. The samples should be taken from the traveled portion of the lane with the area measured and recorded on the appropriate data form. With a whisk broom and a dust pan, the larger particles are collected from the sampling area and placed in a clean, labeled sample container (plastic jar or bag). The remaining smaller particles are then swept from the road with an electric broom-type vacuum sweeper. The sweeper must be equipped with a preweighed, prelabeled, disposable vacuum bag. Care must be taken when installing the bags in the sweeper to avoid torn bags which can result in sample loss. After the sample has been collected, the bag should be removed from the sweeper, checked for leaks and stored in a prelabeled, gummed envelope, and sealed for transport. Figure F-5 presents a data form to be used for the sampling of paved roads and Figure F-6 provides photos of sampling procedures for industrial roads and city streets.

Sampling Data for Unpaved Roads

Date Sample Collected _____ Recorded by _____

Type of Material Sampled: _____
Site of Sampling*: _____

SAMPLING METHOD

1. Sampling device: whisk broom and dust pan
2. Sampling depth: loose surface material (do not abrade road base)
3. Sample container: metal or plastic bucket with sealed poly liner
4. Gross sample specifications:
   (a) 1 sample of 23kg (50 lb) minimum for every 3.8 km (3 mi) sampled
   (b) composite of 4 increments: lateral strips of 6" width extending over traveled portion of roadway

Indicate deiviations from above methods and general meteorology: _____

SAMPLING DATA

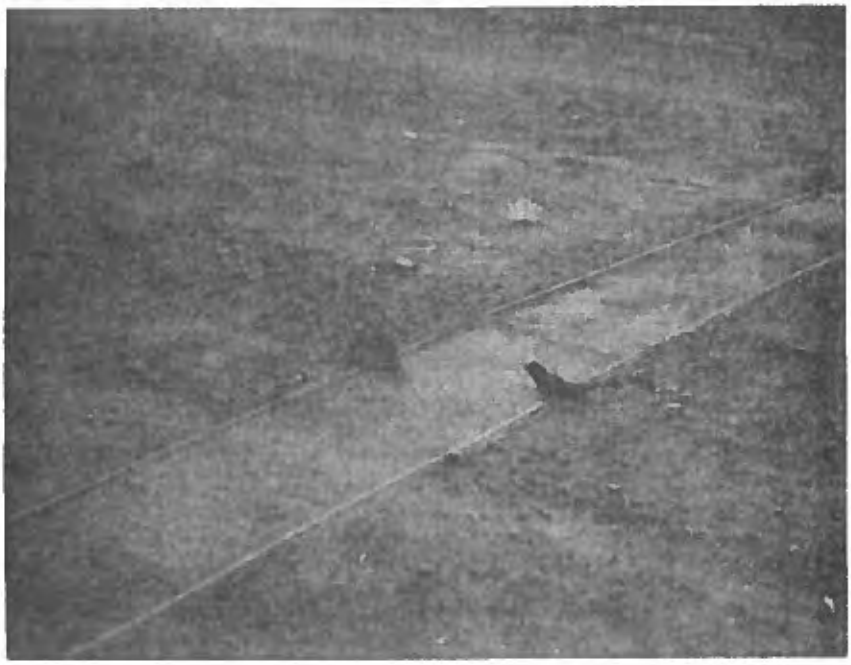
Sample No.	Time	Location*	Surface Area	Depth	Quantity of Sample

* Use code given on plant or road map for segment identification and indicate sample on map.

DIAGRAM

Figure F-2. Data form for unpaved road sampling.

(a) Wisk broom and pan for surface sampling.



(b) Sample strip across road width.

Figure F-3. Unpaved road sampling.

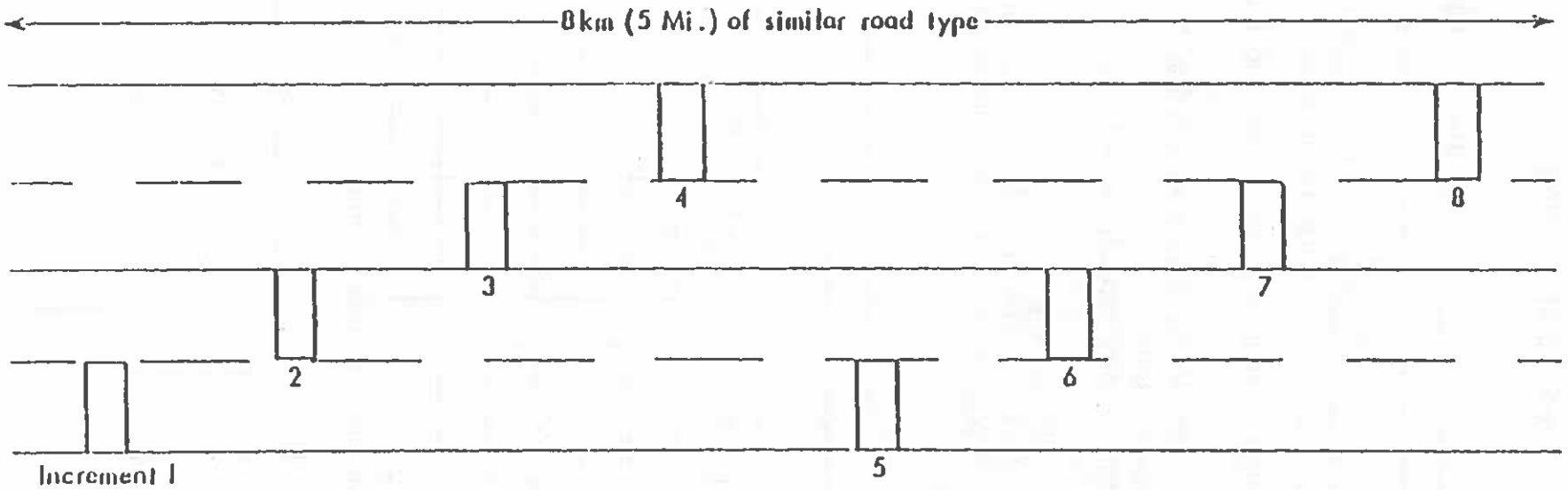


Figure F-4. Location of incremental sampling sites on a paved road.

Figure F-5. Data form for paved road sampling. R001557

Paved Road Loading

Date Sample Collected _____ Recorded by _____

Type of Material Sampled: _____ No. of Traffic Lanes: _____
Sampling Location*: _____ Surface Condition: _____

* Use code given on plant or road map for segment identification and indicate sample on map.

SAMPLING METHOD

1. Sampling device: Portable vacuum cleaner (broom sweep first if loading is heavy)
2. Sampling depth: Loose surface material
3. Sample container: Tared and numbered vacuum cleaner bags
4. Gross sample specifications:
   (a) 1 sample every 8 kg (5 mi) of road length
   (b) Composite two segments per travel lane (each 0.5 mi or 0.8 km should have separate sample): lateral strips of 0.3 m minimum width extending from curb to curb
   (c) Do not sample curb areas

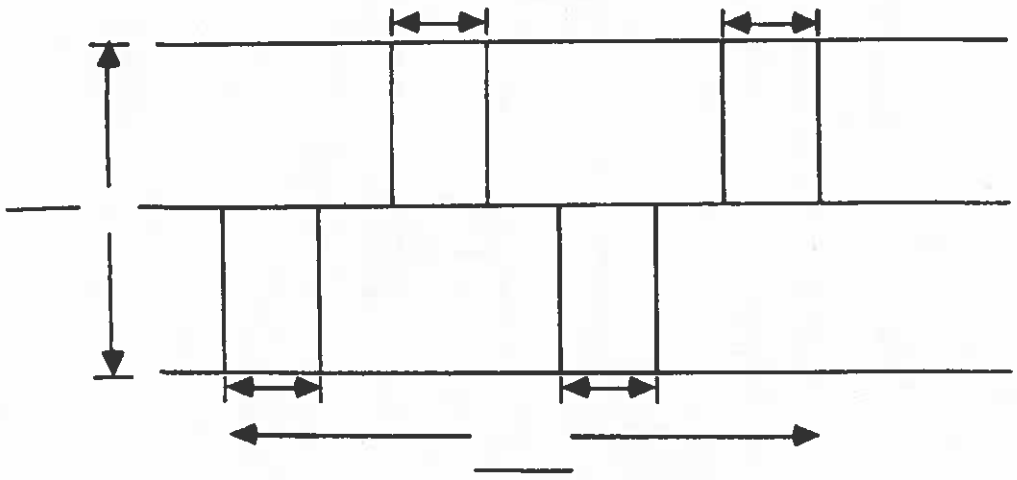
Indicate deiviations from above method: _____

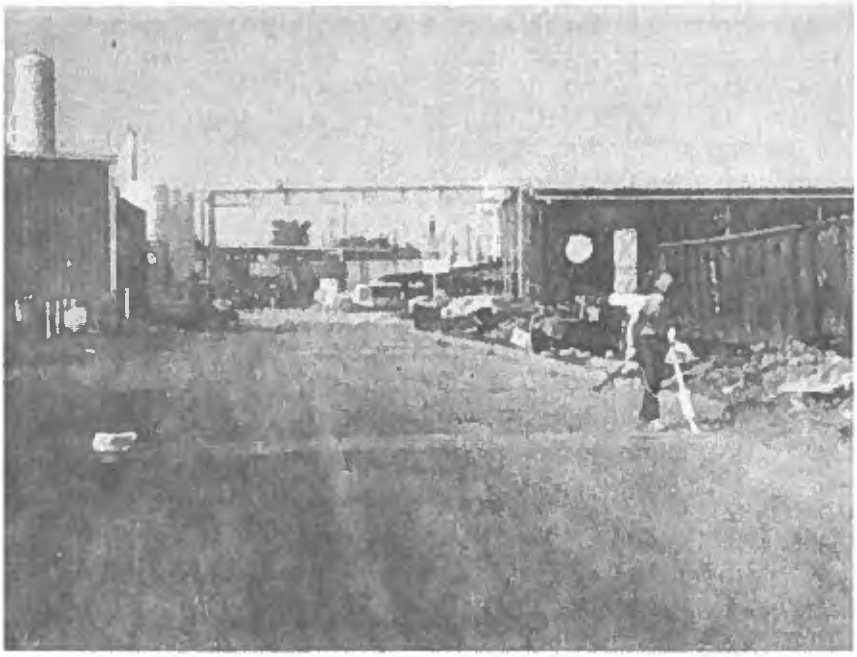
SAMPLING DATA

Sample No.	Vac Bag	Time	Surface Area	Broom Swept?

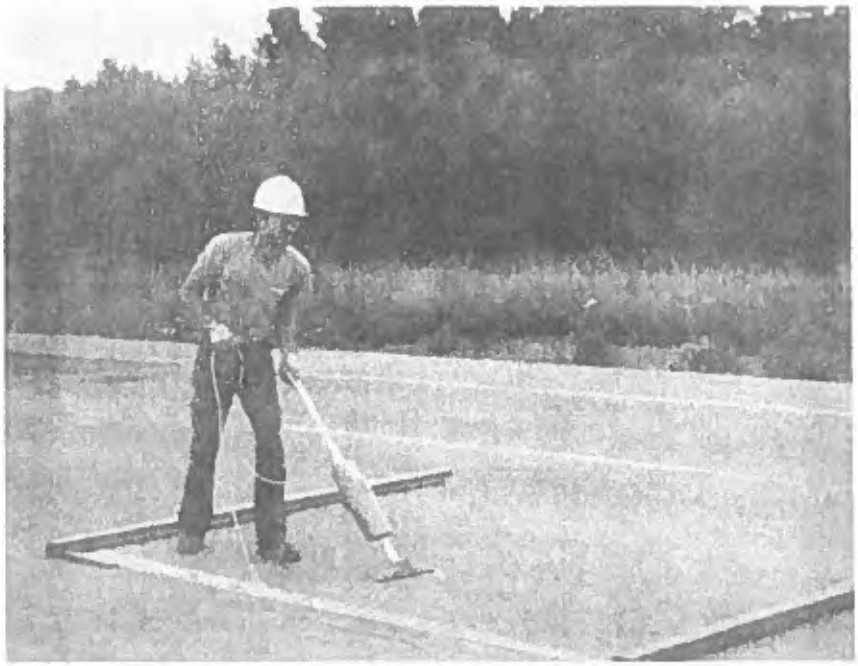
Sample No.	Vac Bag	Time	Surface Area	Broom Swept?

DIAGRAM (mark each segment with vacuum bag number)





(a) Sampling of industrial paved roads.



(b) Sampling of city street.

Figure F-6. Paved road sampling procedures.

F.1.3 Storage Piles

In sampling the surface of a pile to determine representative properties for use in the wind erosion (or materials handling) equation, a gross sample made up of top, middle, and bottom incremental samples should ideally be obtained since the wind disturbs the entire surface of the pile. However, it is impractical to climb to the top or even middle of most industrial storage piles because of the large size.

The most practical approach in sampling from large piles is to minimize the bias by sampling as near to the middle of the pile as practical and by selecting sampling locations in a random fashion. Incremental samples should be obtained along the entire perimeter of the pile. The spacing between the samples should be such that the entire pile perimeter is traversed with approximately equidistant incremental samples. If small piles are sampled, incremental samples should be collected from the top, middle, and bottom.

An incremental sample (e.g., one shovelful) is collected by skimming the surface of the pile in a direction upward along the face. Every effort must be made by the person obtaining the sample not to purposely avoid sampling larger pieces of raw material. Figure F-7 presents a data form to be used for the sampling of storage piles.

In obtaining a gross sample for the purpose of characterizing a load-in or load-out process, incremental samples should be taken from the portion of the storage pile surface (1) which has been formed by the addition of aggregate material or (2) from which aggregate material is being reclaimed.

F.2 LABORATORY ANALYSIS

F.2.1 Sources Other Than Paved Roads

F.2.1.1 Sample Preparation--

Once the gross sample is brought to the laboratory, it must be prepared for silt analysis. This entails dividing the sample to a workable size.

A 23-kg (50-lb) gross sample can be divided by using: (1) mechanical devices; (2) alternative shovel method; (3) riffle; or (4) coning and quartering method. Mechanical division devices are not discussed in this section since they are not found in many laboratories. The alternative shovel method is actually only necessary for samples weighing hundreds of pounds. Therefore, this section discusses only the use of the riffle and the coning and quartering method.

Sampling Data for Storage Piles

Date Sample Collected _____ Recorded by _____

Type of Material Sampled: _____
Site of Sampling: _____

SAMPLING METHOD

1. Sampling device: pointed shovel
2. Sampling depth: 4-6 inches (10-15 cm)
3. Sample container: metal or plastic bucket with sealed poly liner
4. Gross sample specifications:
   (a) 1 sample of 23kg (50 lb) minimum for every pile sampled
   (b) composite of 10 increments
5. Minimum portion of stored material (at one site) to be sampled: 25%

Indicate deiviations from above method: _____

SAMPLING DATA

Sample No.	Time	Location (Refer to map)	Surface Area	Depth	Quantity of Sample

Figure F-7. Data form for storage pile sampling.

ASTM standards describe the selection of the correct riffle size and the correct use of the riffle. Riffle slot widths should be at least three times the size of the largest aggregate in the material being divided. The following quote describes the use of the riffle.[1]

> "Divide the gross sample by using a riffle. Riffles properly used will reduce sample variability but cannot eliminate it. Riffles are shown in Figure F-8(a) and (b). Pass the material through the riffle from a feed scoop, feed bucket, or riffle pan having a lip or opening the full length of the riffle. When using any of the above containers to feed the riffle, spread the material evenly in the container, raise the container, and hold it with its front edge resting on top of the feed chute, then slowly tilt it so that the material flows in a uniform stream through the hopper straight down over the center of the riffle into all the slots, thence into the riffle pans, one-half of the sample being collected in a pan. Under no circumstances shovel the sample into the riffle, or dribble into the riffle from a small-mouthed container. Do not allow the material to build up in or above the riffle slots. If it does not flow freely through the slots, shake or vibrate the riffle to facilitate even flow."

The procedure for coning and quartering is best illustrated in Figure F-9. The following is a description of the procedure: (1) mix the material and shovel it into a neat cone; (2) flatten the cone by pressing the top without further mixing; (3) divide the flat, circular pile into equal quarters by cutting or scraping out two diameters at right angles; (4) discard two opposite quarters; (5) thoroughly mix the two remaining quarters, shovel them into a cone, and repeat the quartering and discarding procedures until the sample has been reduced to 0.9 to 1.8 kg (2 to 4 lb). Samples likely to be affected by moisture or drying must be handled rapidly, preferably in an area with a controlled atmosphere, and sealed in a container to prevent further changes during transportation and storage. Care must be taken that the material is not contaminated by anything on the floor or that a portion is not lost through cracks or holes. Preferably, the coning and quartering operation should be conducted on a floor covered with clean paper or plastic.

The size of the laboratory sample is important--too little sample will not be representative and too much sample will be unwieldy. Ideally, one would like to analyze the entire gross sample in batches, but this is not practical. While all ASTM standards acknowledge this impracticality, they disagree on the exact size, as indicated by the range of recommended samples, extending from 0.05 to 27 kg (0.1 to 60 lb).

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1 D2013-72. Standard Method of Preparing Coal Samples for Analysis. Annual Book of ASTM Standards, 1977.

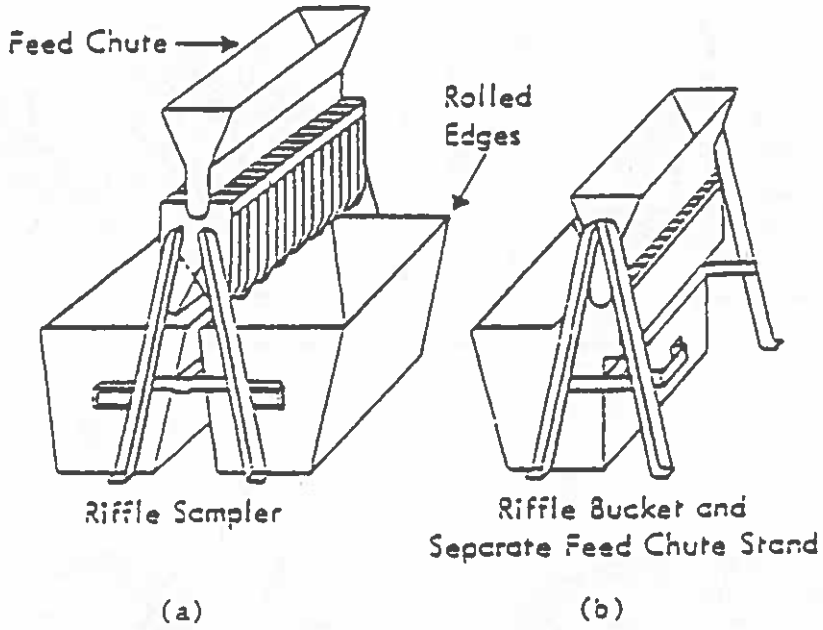

Figure F-8. Sample dividers (riffles).

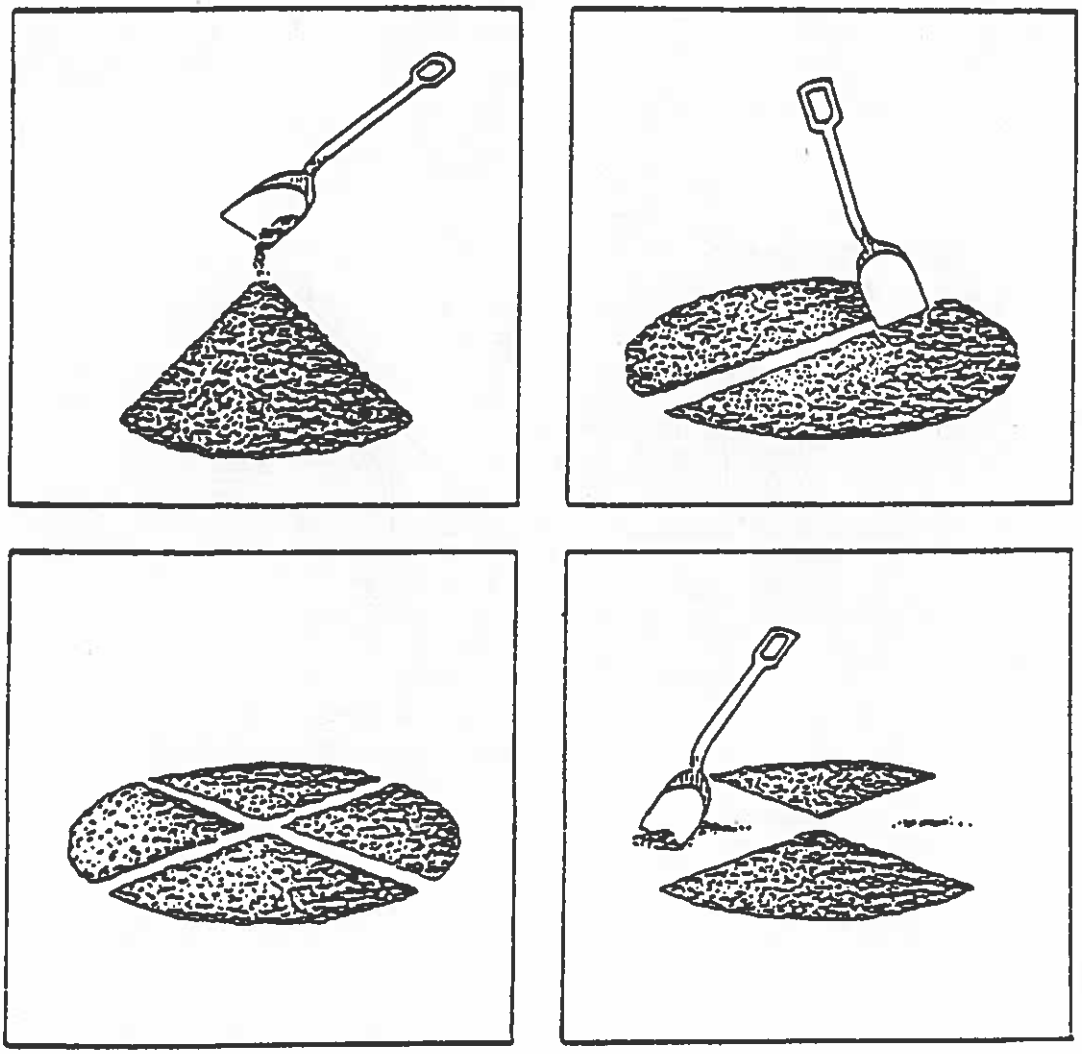

Figure F-9. Coning and quartering.

The main principle in sizing the laboratory sample is to have sufficient coarse and fine portions to be representative of the material and to allow sufficient mass on each sieve so that the weighing is accurate. A recommended rule of thumb is to have twice as much coarse sample as fine sample. A laboratory sample of 800 to 1,600 g is recommended since that is the largest quantity that can be handled by the scales normally available (1,600-g capacity). Also, more sample than this can produce screen blinding for the 8-in-diameter screens normally available.

F.2.1.2 Laboratory Analysis of Samples for Silt Content--

The basic recommended procedure for silt analysis is mechanical dry sieving after moisture analysis. A step-by-step procedure is given in Tables F-1 and F-2. The sample should be oven-dried for 24 h at 230°F (110°C) before sieving. The sieving time is variable; sieving should be continued until the net sample weight collected in the pan increases by less than 3.0% of the previous net sample weight collected in the pan. A minor variation of 3.0% is allowed since some sample grinding due to interparticle abrasion will occur, and consequently, the weight will continue to increase. When the change reduces to 3.0%, it is thought that the natural silt has been passed through the No. 200 sieve screen (75 μmP) and that any additional increase is due to grinding. Both the sample preparation operations and the sieving results can be recorded on Figures F-10 and F-11.

F.2.2 Samples From Paved Roads

F.2.2.1 Sample Preparation and Analysis for Total Loading--

The gross sample of paved road dust will arrive at the laboratory in two types of containers: (1) the broom-swept dust will be in plastic bags; and (2) the vacuum-swept dust will be in vacuum bags.

Both the broom-swept dust and the vacuum-swept dust are weighed on a beam balance. The broom-swept dust is weighed in a tared container. The vacuum-swept dust is weighed in the vacuum bag which was tared and equilibrated in the laboratory before going to the field. The vacuum bag and its contents should be equilibrated again in the laboratory before weighing.

The total surface dust loading on the traveled lanes of the paved road is then calculated in units of kilograms of dust on the traveled lanes per kilometer of road. When only one strip is taken across the traveled lanes, the total dust loading on the traveled lanes is calculated as follows:

$$L = \frac{m_b + m_v}{\ell} \qquad \text{(F-1)}$$

where: L = surface dust loading (kg/km)

m_b = mass of the broom-swept dust (kg)

m_v = mass of the vacuum-swept dust (kg)

ℓ = length of strip as measured along the centerline of the road (km)

TABLE F-1. MOISTURE ANALYSIS PROCEDURE

1. Preheat the oven to approximately 110°C (230°F). Record oven temperature.

2. Tare the laboratory sample containers which will be placed in the oven. Tare the containers with the lids on if they have lids. Record the tare weight(s). Check zero before weighing.

3. Record the make, capacity, smallest division, and accuracy of the scale.

4. Weigh the laboratory sample in the container(s). Record the combined weight(s). Check zero before weighing.

5. Place sample in oven and dry overnight.[a]

6. Remove sample container from oven and (a) weigh immediately if uncovered, being careful of the hot container; or (b) place tight-fitting lid on the container and let cool before weighing. Record the combined sample and container weight(s). Check zero before weighing.

7. Calculate the moisture as the initial weight of the sample and container minus the oven-dried weight of the sample and container divided by the initial weight of the sample alone. Record the value.

8. Calculate the sample weight to be used in the silt analysis as the oven-dried weight of the sample and container minus the weight of the container. Record the value.

[a]Dry materials composed of hydrated minerals or organic materials like coal and certain soils for only 1-1/2 h. Because of this short drying time, material dried for only 1-1/2 h must not be more than 2.5 cm (1 in.) deep in the container.

TABLE F-2. SILT ANALYSIS PROCEDURES

1. Select the appropriate 8-in. diameter, 2-in. deep sieve sizes. Recommended U.S. Standard Series sizes are: 3/8 in., No. 4, No. 20, No. 40, No. 100, No. 140, No. 200, and a pan. Comparable Tyler Series sizes can also be utilized. The No. 20 and the No. 200 are mandatory. The others can be varied if the recommended sieves are not available or if buildup on one particulate sieve during sieving indicates that an intermediate sieve should be inserted.

2. Obtain a mechanical sieving device such as vibratory shaker or a Roto-Tap.

3. Clean the sieves with compressed air and/or a soft brush. Material lodged in the sieve openings or adhering to the sides of the sieve should be removed (if possible) without handling the screen roughly.

4. Obtain a scale (capacity of at least 1,600 g) and record make, capacity, smallest division, date of last calibration, and accuracy (if available).

5. Tare sieves and pan. Check the zero before every weighing. Record weights.

6. After nesting the sieves in decreasing order with pan at the bottom, dump dried laboratory sample (probably immediately after moisture analysis) into the top sieve. Brush fine material adhering to the sides of the container into the top sieve and cover the top sieve with a special lid normally purchased with the pan.

7. Place nested sieves into the mechanical device and sieve for 20 min. Remove pan containing minus No. 200 and weigh. Replace pan beneath the sieves and sieve for another 10 min. Remove pan and weigh. When the differences between two successive pan sample weighings (where the tare of the pan has been subtracted) is less than 3.0 percent, the sieving is complete.

8. Weigh each sieve and its contents and record the weight. Check the zero before every weighing.

9. Collect the laboratory sample and place the sample in a separate container if further analysis is expected.

Sample No: _____
Material: _____

Split Sample Balance:
Make _____
Capacity _____
Smallest Division _____

Total Sample Weight: _____
(Excl. Container)
Number of Splits: _____

Split Sample Weight (before drying)
Pan + Sample: _____
Pan: _____
Wet Sample: _____

Oven Temperature: _____
Date In _____ Date Out _____
Time In _____ Time Out _____
Drying Time _____

Material Weight (after drying)
Pan + Material: _____
Pan: _____
Dry Sample: _____

MOISTURE CONTENT:
(A) Wet Sample Wt. _____
(B) Dry Sample Wt. _____
(C) Difference Wt. _____

$$\frac{C \times 100}{A} = _____ \%\ \text{Moisture}$$

Figure F-10. Example moisture analysis form.

Sample No: _____
Material: _____

Split Sample Balance:
Make _____
Capacity _____
Smallest Division _____

Material Weight (after drying)
Pan + Material: _____
Pan: _____
Dry Sample: _____

Final Weight: _____

$$\% \text{ Silt} = \frac{\text{Net Weight} < 200 \text{ Mesh}}{\text{Total Net Weight}} \times 100 = _____ \%$$

SIEVING

Time: Start:	Weight (Pan Only)
Initial (Tare):	
20 min:	
30 min:	
40 min:	

SIZE DISTRIBUTION

Screen	Tare Weight (Screen)	Final Weight (Screen + Sample)	Net Weight (Sample)	%
3/8 in.				
4 mesh				
10 mesh				
20 mesh				
40 mesh				
100 mesh				
140 mesh				
200 mesh				
Pan				

Figure F-11. Example silt analysis form.

When several incremental samples are collected on alternate roadway halves as shown in Figure F-4, the total surface dust loading is calculated as follows:

$$L = \frac{m_{b1} + m_{v1} + m_{b5} + m_{v5}}{\ell_1 + \ell_5} + \frac{m_{b2} + m_{v2} + m_{b6} + m_{v6}}{\ell_2 + \ell_6} + \frac{m_{b3} + m_{v3} + m_{b7} + m_{v7}}{\ell_3 + \ell_7} + \frac{m_{b4} + m_{v4} + m_{b8} + m_{v8}}{\ell_4 + \ell_8} + \quad \text{(F-2)}$$

where: L = surface dust loading (kg/km)

m_{b_i} = mass of broom sweepings for increment i (kg)

m_{v_i} = mass of vacuum sweepings for increment i (kg)

ℓ = length of increment i is measured along the road centerline (km)

F.2.2.2 Sample Preparation and Analyses for Road Dust Silt Content--

After weighing the sample to calculate total surface dust loading on the traveled lanes, the broom-swept and vacuum-swept dust is composited. The composited sample is usually small and requires no sample splitting in preparation for sieving. If splitting is necessary to prepare a laboratory sample of 800 to 1,600 g, the techniques discussed in Section F.2.1.1 can be used. The laboratory sample is then sieved using the techniques described in Section F.2.1.2.

WRAP Fugitive Dust Handbook

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PREFACE

In 2004 the Western Regional Air Partnership's (WRAP) Dust Emissions Joint Forum (DEJF) selected Countess Environmental to prepare a fugitive dust handbook and an associated website (www.wrapair.org/forums/dejf/fdh) for accessing the information contained in the handbook. The material presented in the original handbook released on November 15, 2004 addressed the estimation of uncontrolled fugitive dust emissions and emission reductions achieved by demonstrated control techniques for eight major fugitive dust source categories. In 2006 WRAP hired Countess Environmental to update the handbook. The updates included revising each chapter in the handbook to reflect the new PM2.5/PM10 ratios developed for WRAP by the Midwest Research Institute (MRI) in 2005, addressing four additional major fugitive dust source categories as well as several minor source categories, and updating the existing chapters.

The material in this handbook focuses on fugitive dust emissions "at the source" and does not evaluate factors related to the transport and impact of emissions on downwind locations where ambient air monitoring occurs. The methods for estimation of dust emissions rely primarily on AP-42 with additional references to alternative methods adopted by state and local control agencies in the WRAP region. With regard to emission factor correction parameters, source extent/activity levels, control efficiencies for demonstrated control techniques, and emission reductions by natural mitigation and add-on control measures, sources of data are identified and default values are provided in tables throughout the handbook. Graphs, charts, and tables are provided throughout the handbook to assist the end user.

The handbook:

(a) compiles technical and policy evaluations for the benefit of WRAP members, stakeholders, and other interested parties when addressing specific air quality issues and when developing regional haze implementation plans;

(b) incorporates available information from both the public (federal, state and local air quality agencies) and private sectors (e.g., reports addressing options to reduce fugitive dust emissions in areas of the country classified as nonattainment for PM10); and

(c) serves as a comprehensive reference resource tool of currently available technical information on emission estimation methodologies and control measures for the following twelve fugitive dust source categories: agricultural tilling, agricultural harvesting, construction and demolition, materials handling, paved roads, unpaved roads, mineral products industry, abrasive blasting, livestock husbandry, and windblown dust emissions from agricultural fields, material storage piles, and exposed open areas.

This handbook is not intended to suggest any preferred method to be used by stakeholders in preparation of SIPs and/or Conformity analyses but rather to outline the most commonly adopted methodologies currently used in the US. The information contained in this handbook has been derived from a variety of sources each with its own accuracy and use limitations. Because many formulae and factors incorporate default values that have been derived for average US conditions, area specific factors should be used whenever they are available. Additionally, the

input terms (commonly referred to as "correction factors") used in any given emission factor equation presented in this handbook were obtained using a specific test methodology and are designed to give an estimate of the emission from a specific activity or source under specific conditions. As a result the emission estimate must be used appropriately in any downstream application such as dispersion modeling of primary PM emissions.

It is important to note that EPA's criteria for exceedances, violations, and model calibration and validation are based on ambient data from the National Ambient Air Monitoring Sites. It should be further noted that estimates of the relative contribution of fugitive dust to ambient PM concentrations based on chemical analysis of exposed filters are usually much lower than that based on emission inventory estimates, in some cases by a factor of 4. Part of this discrepancy between ambient measurements and emission estimates is due to the near source deposition losses of freshly generated fugitive dust emissions. It is not an objective of this handbook to resolve this modeling discrepancy issue. It is the role of modelers to incorporate deposition losses into their dispersion models and to account for the formation of secondary PM, which in many areas of the country are responsible for an overwhelming contribution to exceedances of the federal PM NAAQS.

Applicability to Tribes

The Regional Haze Rule explicitly recognizes the authority of tribes to implement the provisions of the Rule, in accordance with principles of Federal Indian law, and as provided by the Clean Air Act §301(d) and the Tribal Authority Rule (TAR) (40 CFR §§49.1– .11). Those provisions create the following framework:

1. Absent special circumstances, reservation lands are not subject to state jurisdiction.

2. Federally recognized tribes may apply for and receive delegation of federal authority to implement CAA programs, including visibility regulation, or "reasonably severable" elements of such programs (40 CFR §§49.3, 49.7). The mechanism for this delegation is a Tribal Implementation Plan (TIP). A reasonably severable element is one that is not integrally related to program elements that are not included in the plan submittal, and is consistent with applicable statutory and regulatory requirements.

3. The Regional Haze Rule expressly provides that tribal visibility programs are "not dependent on the strategies selected by the state or states in which the tribe is located" (64. Fed. Reg. 35756), and that the authority to implement §309 TIPs extends to all tribes within the GCVTC region (40 CFR §51.309(d)(12).

4. The EPA has indicated that under the TAR tribes are not required to submit §309 TIPs by the end of 2003; rather they may choose to opt-in to §309 programs at a later date (67 Fed. Reg. 30439).

5. Where a tribe does not seek delegation through a TIP, EPA, as necessary and appropriate, will promulgate a Federal Implementation Plan (FIP) within reasonable timeframes to protect air quality in Indian country (40 CFR §49.11). EPA is committed to consulting with tribes on a

government-to-government basis in developing tribe-specific or generally applicable TIPs where necessary (see, e.g., 63 Fed. Reg.7263-64).

It is our hope that the findings and recommendations of this handbook will prove useful to tribes, whether they choose to submit full or partial 308 or 309 TIPs, or work with EPA to develop FIPs. We realize that the amount of modification necessary will vary considerably from tribe to tribe and we have striven to ensure that all references to tribes in the document are consistent with principles of tribal sovereignty and autonomy as reflected in the above framework. Any inconsistency with this framework is strictly inadvertent and not an attempt to impose requirements on tribes which are not present under existing law.

Tribes, along with states and federal agencies, are full partners in the WRAP, having equal representation on the WRAP Board as states. Whether Board members or not, it must be remembered that all tribes are governments, as distinguished from the "stakeholders" (private interest) which participate on Forums and Committees but are not eligible for the Board. Despite this equality of representation on the Board, tribes are very differently situated than states. There are over four hundred federally recognized tribes in the WRAP region, including Alaska. The sheer number of tribes makes full participation impossible. Moreover, many tribes are faced with pressing environmental, economic, and social issues, and do not have the resources to participate in an effort such as the WRAP, however important its goals may be. These factors necessarily limit the level of tribal input into and endorsement of WRAP products.

The tribal participants in the WRAP, including Board members, Forum and Committee members and co-chairs, make their best effort to ensure that WRAP products are in the best interest of the tribes, the environment, and the public. One interest is to ensure that WRAP policies, as implemented by states and tribes, will not constrain the future options of tribes who are not involved in the WRAP. With these considerations and limitations in mind, the tribal participants have joined the state, federal, and private stakeholder interests in approving this handbook as a consensus document.

EXECUTIVE SUMMARY

This fugitive dust handbook addresses the estimation of uncontrolled fugitive dust emissions and emission reductions achieved by demonstrated control techniques for twelve major and several minor fugitive dust source categories. The handbook focuses on fugitive dust emissions "at the source" and does not evaluate factors related to the transport and impact of emissions on downwind locations where ambient air monitoring occurs. The methods for estimating emissions draw (a) from established methods published by the USEPA, specifically AP-42: Compilation of Air Pollutant Emission Factors that are available from the Internet (www.epa.gov/ttn/chief/ap42), and (b) from alternate methods adopted by state and local air control agencies in the WRAP region such as the California Air Resources Board (www.arb.ca.gov/ei/areasrc/areameth.htm), Clark County, Nevada (www.co.clark.nv.us/air_quality), and Maricopa County, Arizona (www.maricopa.gov/envsvc/air). Sources of data are identified and default values for emission factor correction parameters, source extent/activity levels, control efficiencies, and emission reductions by natural mitigation and add-on control measures are provided in tables throughout the handbook.

The handbook has several distinct features that give it a major advantage over the use of AP-42 or other resource documents. The handbook is a comprehensive document that contains all the necessary information to develop control strategies for major sources of fugitive dust. These features include:

(a) extensive documentation of emission estimation methods adopted by both federal and state agencies as well as methods in the "developmental" stage;
(b) detailed discussion of demonstrated control measures;
(c) lists of published control efficiencies for a large number of fugitive dust control measures;
(d) example regulatory formats adopted by state and local agencies in the WRAP region;
(e) compliance tools to assure that the regulations are being followed; and
(f) a detailed methodology for calculating the cost-effectiveness of different fugitive dust control measures, plus sample calculations for control measure cost-effectiveness for each fugitive dust source category.

The handbook and associated website (www.wrapair.org/forums/dejf/fdh) are intended to:

(a) support technical and policy evaluations by WRAP members, stakeholders, and other interested parties when addressing specific air quality issues and when developing regional haze implementation plans;

(b) incorporate available information from both the public and private sectors that address options to reduce fugitive dust emissions in areas of the country classified as nonattainment for PM10; and

(c) provide a comprehensive resource on emission estimation methodologies and control measures for the following twelve fugitive dust source categories: agricultural tilling, agricultural harvesting, construction and demolition, materials handling, paved roads, unpaved roads, minerals products industry, abrasive blasting, livestock husbandry, and windblown dust emissions from agricultural fields, material storage piles, and exposed open areas.

The handbook contains separate, stand-alone chapters for each of the twelve major fugitive dust source categories identified above. Because the chapters are meant to stand alone, there is some redundancy between chapters. Each chapter contains a discussion of characterization of the source emissions, established emissions estimation methodologies, demonstrated control techniques, regulatory formats, compliance tools, a sample control measure cost-effectiveness calculation, and references. A separate chapter addressing several minor fugitive dust source categories and several appendices are also included in the handbook. Appendix A contains a discussion of test methods used to quantify fugitive dust emission rates. Appendix B contains cost information for demonstrated control measures. Appendix C contains a step-wise method to calculate the cost-effectiveness of different fugitive dust control measures. Appendix D contains a brief discussion of fugitive PM10 management plans and record keeping requirements mandated by one of the air quality districts within the WRAP region.

A list of fugitive dust control measures that have been implemented by jurisdictions designated by the USEPA as nonattainment for federal PM10 standards is presented in the table below. The published PM10 control efficiencies for different fugitive dust control measures vary over relatively large ranges as reflected in the table. The user of the handbook is cautioned to review the assumptions included in the original publications (i.e., references identified in each chapter of the handbook) before selecting a specific PM10 control efficiency for a given control measure. It should be noted that Midwest Research Institute (MRI) found no significant differences in the measured control efficiencies for the PM2.5 and PM10 size fractions of unpaved road emissions based on repeated field measurements of uncontrolled and controlled emissions. Thus, without actual published PM2.5 control efficiencies, the user may wish to utilize the published PM10 values for both size fractions.

Many control cost-effectiveness estimates were reviewed in preparation of this handbook. Some of these estimates contain assumptions that are difficult to substantiate and often appear unrealistic. Depending on which assumptions are used, the control cost-effectiveness estimates can vary by one to two orders of magnitude. Thus, rather than presenting existing cost-effectiveness estimates, the handbook presents a detailed methodology to calculate the cost-effectiveness of different fugitive dust control measures. This methodology is presented in Appendix C. The handbook user is advised to calculate the cost-effectiveness values for different fugitive dust control options based on current cost data and caveats that are applicable to the particular situation.

Fugitive Dust Control Measures Applicable for the WRAP Region

Source Category	Control Measure	Published PM10 Control Efficiency
Agricultural Tilling	Reduce tilling during high winds	1 – 5%
	Roughen surface	15 – 64%
	Modify equipment	50%
	Employ sequential cropping	50%
	Increase soil moisture	90%
	Use other conservation management practices	25 - 100%
Agricultural Harvesting	Limited activity during high winds	5 – 70%
	Modify equipment	50%
	Night farming	10%
	New techniques for drying fruit	25 –60%
Construction/Demolition	Water unpaved surfaces	10 – 74%
	Limit on-site vehicle speed to 15 mph	57%
	Apply dust suppressant to unpaved areas	84%
	Prohibit activities during high winds	98%
Materials Handling	Implement wet suppression	50 – 90%
	Erect 3-sided enclosure around storage piles	75%
	Cover storage pile with a tarp during high winds	90%
Paved Roads	Sweep streets	4 – 26%
	Minimize trackout	40 – 80%
	Remove deposits on road ASAP	> 90%
Unpaved Roads	Limit vehicle speed to 25 mph	44%
	Apply water	10 – 74%
	Apply dust suppressant	84%
	Pave the surface	>90%
Mineral Products Industry	Cyclone or muliclone	68 –79%
	Wet scrubber	78 –98%
	Fabric filter	99 – 99.8%
	Electrostatic precipitator	90 – 99.5%
Abrasive Blasting	Water spray	50 – 93%
	Fabric filter	> 95%
Livestock Husbandry	Daily watering of corrals and pens	> 10%
	Add wood chips or mulch to working pens	> 10%
Wind Erosion (agricultural, open area, and storage piles)	Plant trees or shrubs as a windbreak	25%
	Create cross-wind ridges	24 – 93%
	Erect artificial wind barriers	4 – 88%
	Apply dust suppressant or gravel	84%
	Revegetate; apply cover crop	90%
	Water exposed area before high winds	90%

Chapter 1. Introduction

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This chapter describes the purpose for the preparation of this fugitive dust handbook; presents a summary of WRAP's fugitive dust definition and dust emissions categorization scheme; provides a brief overview/primer on fugitive dust that includes a summary of factors affecting dust emissions, an overview of emission calculation procedures (including a discussion of emission factors), and a discussion of options for controlling emissions; and summarizes the organizational structure of the handbook.

This handbook does not address particulate emissions from wildfires or prescribed fires that are discussed in Section 13.1 of EPA's Compilation of Air Pollutant Emission Factors (AP-42). For more information on particulate emissions from fires, the reader is directed to the WRAP's Fire Emissions Joint Forum at www.wrapair.org/forums/fejf.

1.1 Background

Most of the more than 70 areas of the United States that have been unable to attain the national ambient-air quality standards (NAAQS) for PM10 (particles smaller than 10 μm in aerodynamic diameter) are in western states with significant emission contributions from fugitive dust sources. Fugitive dust sources may be separated into two broad categories: process sources and open dust sources. Process sources of fugitive emissions are those associated with industrial operations such as rock crushing that alter the characteristics of a feed material. Open dust sources are those that generate non-ducted emissions of solid particles by the forces of wind or machinery acting on exposed material. Open dust sources include industrial sources of particulate emissions associated with the open transport, storage, and transfer of raw, intermediate, and waste aggregate materials, and nonindustrial sources such as unpaved roads and parking lots, paved streets and highways, heavy construction activities, and agricultural tilling.

On a nationwide basis, fugitive dust consists mostly of soil and other crustal materials. However, fugitive dust may also be emitted from powdered or aggregate materials that have been placed in open storage piles or deposited on the ground or roadway surfaces by spillage or vehicle trackout. Dust emissions from paved roadways contain tire and break wear particles in addition to resuspended road surface dust composed mostly of crustal geological material.

Generic categories of open dust sources include:

Agricultural Tilling and Harvesting
Construction and Demolition (Buildings, Roads)
Materials Handling
Paved Travel Surfaces
Unpaved Travel Surfaces
Minerals Products Industry (Metallic Ores, Non-metallic Ores, Coal)
Abrasive Blasting
Livestock Husbandry (Dairies, Cattle Feedlots)
Wind Erosion of Exposed Areas (Agricultural Fields, Open Areas, Storage Piles)

1.2 Purpose of the Handbook

In early 2004 the Western Regional Air Partnership's (WRAP) Dust Emissions Joint Forum (DEJF) selected the Countess Environmental project team composed of senior scientists/consultants from Countess Environmental and Midwest Research Institute to prepare a fugitive dust handbook and a website (www.wrapair.org/forums/dejf/fdh) for accessing the information contained in the handbook. The handbook and website are intended to:

(a) be used for technical and policy evaluations by WRAP members, stakeholders, and other interested parties when addressing specific air quality issues and when developing regional haze implementation plans;
(b) incorporate available information from both the public and private sectors that address options to reduce fugitive dust emissions in areas of the country classified as nonattainment for PM10; and
(c) serve as a comprehensive reference resource tool that will provide technical information on emission estimation methodologies and control measures for all of the major and several minor fugitive dust source categories.

The material presented in the original handbook released on November 15, 2004 addressed the estimation of uncontrolled fugitive dust emissions and emission reductions achieved by demonstrated control techniques for eight major fugitive dust source categories. In 2006 WRAP hired Countess Environmental to update the handbook. The updates included revising each chapter in the handbook to reflect the new PM2.5/PM10 ratios developed for WRAP by the Midwest Research Institute (MRI) in 2005, addressing four additional major fugitive dust source categories as well as several minor source categories, and updating the existing chapters.

1.3 Dust Definition and Categorization Scheme

The WRAP Dust Emissions Joint Forum (DEJF) adopted a definition of dust and fugitive dust on October 21, 2004 that included developing criteria for separating anthropogenic dust from dust of natural origin.[1] Dust was defined as particulate matter which is or can be suspended into the atmosphere as a result of mechanical, explosive, or windblown suspension of geologic, organic, synthetic, or dissolved solids, and does not include non-geologic particulate matter emitted directly by internal and external combustion processes. Fugitive dust was defined as dust that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. The purpose of these definitions is to provide consistency when using the terms dust, fugitive dust, anthropogenic dust, and natural dust in the context of the federal regional haze rule. The distinction between anthropogenic dust and natural dust is made to: (a) clarify how the WRAP defines dust, its sources, and causes; (b) provide an operational definition for use in receptor- and emissions-based source apportionment techniques; and (c) identify and prioritize sources of dust which are most appropriate to control for purposes of improving visibility in Class I areas.

Natural and anthropogenic dust will often be indistinguishable and may occur simultaneously. For example, natural, barren areas will emit some dust during high wind events, but will emit more when the surface is disturbed by human activities. Hence, the dust from a disturbed, naturally barren area on a given day could be part natural and part anthropogenic. Any mitigation of dust for regional haze control would likely be focused on those anthropogenic sources which are most likely to contribute to visibility impairment in Class I areas and which are technically feasible and cost-effective to control. Sources that are already controlled or partially controlled may be technically infeasible or not cost-effective to control further. According to the WRAP's definition of dust, anthropogenic emissions do not include any emissions that would occur if the surface were not disturbed or altered beyond a natural range. Such emissions should be subtracted, if practicable, from the total dust emissions to determine the precise anthropogenic emission quantity.

Examples of anthropogenic and natural dust categories in accordance with the WRAP's dust definition are provided in Tables 1-1 and 1-2. All mechanically suspended dust from human activities is classified as anthropogenic emissions, and windblown dust from lands not disturbed or altered by humans beyond a natural range is classified as natural emissions. For emissions from other sources, the emissions may be categorized as either anthropogenic or natural, depending on whether the mechanically-suspended emissions are due to indigenous or non-indigenous animals, and whether the windblown emissions are from surfaces disturbed by humans beyond a natural range or from surfaces which have not been disturbed by humans beyond a natural range.

Table 1-1. WRAP Fugitive Dust Categorization Scheme for Mechanically Generated Dust

Anthropogenic Dust	Natural Dust
Mechanically- and explosively-suspended solids and dissolved solids from activities including but not limited to: • Agriculture • Construction, mining, and demolition • Material handling, processing, and transport • Vehicular movement on paved and unpaved surfaces • Animal movement on surfaces which have been disturbed or altered by humans beyond a natural range • Animal movement on undisturbed or unaltered surfaces by a number of animals which is greater than native populations • Cooling towers	• Movement of a number of indigenous animals on surfaces which have not been disturbed or altered by humans beyond a natural range • Natural landslides, rockslides, and avalanches • Solids and dissolved solids emitted by volcanoes, geysers, waterfalls, rapids, and other types of splashing • Extraterrestrial material and impacts

Table 1-2. WRAP Fugitive Dust Categorization Scheme for Windblown Dust

Anthropogenic Dust	Natural Dust
Solids and dissolved solids entrained by wind passing over surfaces that have been disturbed or altered by humans beyond a natural range. Such surfaces may include, but are not limited to: • Undeveloped lands • Construction and mining sites • Material storage piles, landfills, and vacant lots • Agricultural crop, range, and forest lands • Roadways and parking lots • Artificially-exposed beds of natural lakes and rivers • Exposed beds of artificial water bodies • Areas burned by anthropogenic fires (as defined by the WRAP Policy for Categorizing Fire Emissions) which have yet to be revegetated or stabilized	Solids and dissolved solids entrained by wind passing over surfaces that have not been disturbed or altered by humans beyond a natural range. Such surfaces may include, but are not limited to: • Naturally-dry river and lake beds • Barren lands, sand dunes, and exposed rock • Natural water bodies (e.g., sea spray) • Non-agricultural grass, range, and forest lands • Areas burned by natural fires (as defined by the WRAP Policy for Categorizing Fire Emissions) which have yet to be revegetated or stabilized
Wind-blown particulate matter from sources created by natural events over 12 months ago, similar to EPA's natural events policy	

The WRAP's original dust characterization scheme broke down fugitive dust emissions into five categories ranging from 100% anthropogenic emissions (i.e., all mechanically-suspended dust from human activities except animal movement) to 100% natural emissions (i.e., windblown dust from lands not disturbed or altered by humans beyond a natural range), with three categories between these two extremes representing a mixture of anthropogenic and natural emissions. Environ developed an alternative dust characterization scheme for WRAP in 2005 that broke down fugitive dust emissions into three categories based on activity rather than a description of spatial location since very different dust sources may spatially co-exist at the same site.[2] Environ's three categories are:

Category 1: Purely anthropogenic sources (e.g., construction, mining, wind erosion and vehicle traffic on paved and unpaved roads, agricultural tilling and harvesting, wind erosion of agricultural fields, particle emissions from cooling towers).

Category 2: Purely natural sources (e.g., volcanic ash emissions, wind erosion of unstable soil following landslides, mineral particle emissions from wave action/sea spray).

Category 3: Natural sources that may be anthropogenically influenced (e.g., wind erosion and mechanical suspension of soil due to animal movement [both native and non-native], wind erosion of bare areas on natural lands [undisturbed versus previously disturbed], wind erosion of sediment from dried ephemeral water bodies [natural or anthropogenic]).

1.4 Factors Affecting Dust Emissions

1.3.1 Mechanically Generated Dust

Mechanically generated emissions from open dust sources exhibit a high degree of variability from one site to another, and emissions at any one site tend to fluctuate widely. The site characteristics that cause these variations may be grouped into (a) properties of the exposed surface material from which the dust originates, and (b) measures of energy expended by machinery interacting with the surface. These site characteristics are discussed below.

Surface Material Texture and Moisture. The dry-particle size distribution of the exposed soil or surface material determines its susceptibility to mechanical entrainment. The upper size limit for particles that can become suspended has been estimated at ~ 75 μm in aerodynamic diameter.[3] Conveniently, 75 μm in physical diameter is also the smallest particle size for which size analysis by dry sieving is practical.[4] Particles passing a 200-mesh screen on dry sieving are termed "silt". Note that for fugitive dust particles, the physical diameter and aerodynamic diameter are roughly equivalent because of the offsetting effects of higher density and irregular shape. Dust emissions are known to be strongly dependent on the moisture level of the mechanically disturbed material.[3] Water acts as a dust suppressant by forming cohesive moisture films among the discrete grains of surface material. In turn, the moisture level depends on the moisture added by natural precipitation, the moisture removed by evaporation, and moisture movement beneath the surface. The evaporation rate depends on the degree of air movement over the surface, material texture and mineralogy, and the degree of compaction or crusting. The moisture-holding capacity of the air is also important, and it correlates strongly with the surface temperature. Vehicle traffic intensifies the drying process primarily by increasing air movement over the surface.

Mechanical Equipment Characteristics. In addition to the material properties discussed above, it is clear that the physical and mechanical characteristics of materials handling and transport equipment also affect dust emission levels. For example, visual observation suggests (and field studies have confirmed) that vehicle emissions per unit of unpaved road length increase with increasing vehicle speed.[3] For traffic on unpaved roads, studies have also shown positive correlations between emissions and (a) vehicle weight and (b) number of wheels per vehicle.[5] Similarly, dust emissions from materials-handling operations have been found to increase with increasing wind speed and drop distance.

1.3.2 Wind Generated Dust

Wind-generated emissions from open dust sources also exhibit a high degree of variability from one site to another, and emissions at any one site tend to fluctuate widely. The site characteristics that cause these variations may be grouped into (a) properties of the exposed surface material from which the dust originates, and

(b) measures of energy expended by wind interacting with the erodible surface. These site characteristics are discussed below.

Surface Material Texture and Moisture. As in the case of mechanical entrainment, the dry-particle size distribution of the exposed soil or surface material determines its susceptibility to wind erosion. Wind forces move soil particles by three transport modes: saltation, surface creep, and suspension. Saltation describes particles, ranging in diameter from about 75 to 500 μm, that are readily lifted from the surface and jump or bounce within a layer close to the air-surface interface. Particles transported by surface creep range in diameter from about 500 to 1,000 μm. These large particles move very close to the ground, propelled by wind stress and by the impact of small particles transported by saltation. Particles smaller than about 75 μm in diameter move by suspension and tend to follow air currents. As stated above, the upper size limit of silt particles (75 μm in physical diameter) is roughly the smallest particle size for which size analysis by dry sieving is practical. The threshold wind speed for the onset of saltation, which drives the wind erosion process, is also dependent on soil texture, with 100-150 μm particles having the lowest threshold speed. Saltation provides energy for the release of particles in the PM10 size range that typically are bound by surface forces to larger clusters. Dust emissions from wind erosion are known to be strongly dependent on the moisture level of the erodible material.[6] The mechanism of moisture mitigation is the same as that described above for mechanical entrainment.

Nonerodible Elements. Nonerodible elements, such as clumps of grass or stones (larger than about 1 cm in diameter) on the surface, consume part of the shear stress of the wind which otherwise would be transferred to erodible soil. Surfaces impregnated with a large density of nonerodible elements behave as having a "limited reservoir" of erodible particles, even if the material protected by nonerodible elements is itself highly erodible. Wind-generated emissions from such surfaces decay sharply with time, as the particle reservoir is depleted. Surfaces covered by unbroken grass are virtually nonerodible.

Crust Formation. Following the wetting of a soil or other surface material, fine particles will move to form a surface crust. The surface crust acts to hold in soil moisture and resist erosion. The degree of protection that is afforded by a soil crust to the underlying soil may be measured by the modulus of rupture (roughly a measure of the hardness of the crust) and thickness of the crust.[7] Exposed soil that lacks a surface crust (e.g., a disturbed soil or a very sandy soil) is much more susceptible to wind erosion.

Frequency of Mechanical Disturbance. Emissions generated by wind erosion are also dependent on the frequency of disturbance of the erodible surface. A disturbance is defined as an action that results in the exposure of fresh surface material. This would occur whenever a layer of aggregate material is either added to or removed from the surface. The disturbance of an exposed area may also result from the turning of surface material to a depth exceeding the size of the largest material present. Each time that a surface is disturbed, its erosion potential is increased by destroying the mitigative effects of crusts, vegetation, and friable nonerodible elements, and by exposing new surface fines.

Wind Speed. Under high wind conditions that trigger wind erosion by exceeding the threshold velocity, the wind speed profile near the erodible surface is found to follow a logarithmic distribution:[6]

$$u(z) = \frac{u^*}{0.4} \ln \frac{z}{z_0} \quad (z > z_0) \qquad (1)$$

where: u = wind speed (cm/s)
u^* = friction velocity (cm/s)
z = height above test surface (cm)
z_0 = roughness height (cm)
0.4 = von Karman's constant (dimensionless)

The friction velocity *(u^*)* is a measure of wind shear stress on the erodible surface, as determined from the slope of the logarithmic velocity profile. The roughness height (z_0) is a measure of the roughness of the exposed surface as determined from the y-intercept of the velocity profile (i.e., the height at which the wind speed is zero) on a logarithmic-linear graph. Agricultural scientists have established that total soil loss by continuous wind erosion of highly erodible fields is dependent roughly on the cube of wind speed above the threshold velocity.[6] More recent work has shown that the loss of particles in suspension mode follows a similar dependence. Soils protected by nonerodible elements or crusts exhibit a weaker dependence of suspended particulate emissions on wind speed.[9]

Wind Gusts. Although mean atmospheric wind speeds may not be sufficient to initiate wind erosion from a particular "limited-reservoir" surface, wind gusts may quickly deplete a substantial portion of its erosion potential. In addition, because the erosion potential (mass of particles constituting the "limited reservoir") increases with increasing wind speed above the threshold velocity, estimated emissions should be related to the gusts of highest magnitude. The current meteorological variable which appropriately reflects the magnitude of wind gusts is the fastest 2-minute wind speed from the "First Order Summary of the Day," published by the U.S. Weather Service for first order meteorological stations.[10] The quantity represents the wind speed corresponding to the largest linear passage of wind movement during a 2-minute period. Two minutes is approximately the same duration as the half-life of the erosion process (i.e., the time required to remove one-half the erodible particles on the surface). It should be noted that instantaneous peak wind speeds can significantly exceed the fastest 2-minute wind speed. Because the threshold wind speed must be exceeded to trigger the possibility of substantial wind erosion, the dependence of erosion potential on wind speed cannot be represented by any simple linear function. For this reason, the use of an average wind speed to calculate an average emission rate is inappropriate.

Wind Accessibility. If the erodible material lies on an exposed area with little penetration into the surface wind layer, then the material is uniformly accessible to the wind. If this is not the case, it is necessary to divide the erodible area into subareas representing different degrees of exposure to wind. For example, the results of physical modeling show that the frontal face of an elevated materials storage pile is exposed to

surface wind speeds of the same order as the approach wind speed upwind of the pile at a height matching the top of the pile;[11] on the other hand, the leeward face of the pile is exposed to much lower wind speeds.

1.5 Use of Satellite Imagery to Inventory Erodible Vacant Land

Windblown dust from arid soils in the West contributes to exceedances of national air quality standards for inhalable particulate matter. This problem is intensifying because of increasing land disturbance associated with rapid population growth in areas such as the Las Vegas Valley. The rates of fine particle emissions from open areas are strongly dependent on the type and frequency of land disturbance that destroys the mitigative stabilization effects of natural crusting and vegetation. Satellite imagery has been shown to be a useful tool in tracking land disturbances (source activity levels) and the resultant degree of soil vulnerability to high wind events. This method has recently been used to develop an inventory of native desert, disturbed vacant land, stabilized vacant land and private unpaved roads in the Las Vegas Valley.[12] Wind tunnel studies have shown that each of these land categories have distinctly different potentials for wind-generated dust emissions. For example, native desert is essentially non-erodible because of the high stability of the undisturbed soil surface. Conversely, disturbed vacant land such as active grading areas at construction sites has the highest erodibility among the inventoried land categories.

In this study funded by Clark County, Nevada, multi-spectral satellite imagery was used to inventory vacant land and private unpaved roads throughout the Las Vegas Valley. Landsat TM imagery was found to be appropriate for classifying surface areas as a measure of activity level. Although Landsat TM imagery has much lower spatial resolution (30 meter pixel size) than commercial satellite imagery (10 times smaller pixel size), it has higher spectral resolution (an additional two IR wavelength bands) and costs only about 1 percent of the cost of commercial satellite imagery. In the surface classification process, it was found useful to define additional land categories that could be profiled with the satellite imagery, as follows: barren/shadow (areas with steep slopes); concrete; urban vegetation (golf courses and irrigated parks); natural drainage (rocky surfaces); and urban structures (rooftops, asphalt surfaces, etc.). Ground-truthing test sites were used to develop and verify the applicability of distinctive multi-spectral reflectance patterns for each land category. A classification error matrix showed that the method has an 89 percent reliability for this application. This method can be applied at regular intervals to track the effect of land development on emissions from open areas.

1.6 Emission Calculation Procedure

A calculation of the estimated emission rate for a given source requires data on source extent, uncontrolled emission factor, and control efficiency. The mathematical expression for this calculation is given as follows:

$$R = SE\, e\, (1 - c) \qquad (2)$$

where: R = estimated mass emission rate in the specified particle size range
SE = source extent
e = uncontrolled emission factor in the specified particle size range (i.e., mass of uncontrolled emissions per unit of source extent)
c = fractional efficiency of control

The source extent (activity level) is the appropriate measure of source size or the level of activity that is used to scale the uncontrolled emission factor to the particular source in question. For process sources of fugitive particulate emissions, the source extent is usually the production rate (i.e., the mass of product per unit time). Similarly, the source extent of an open dust source entailing a batch or continuous drop operation is the rate of mass throughput. For other categories of open dust sources, the source extent is related to the area of the exposed surface that is disturbed by either wind or mechanical forces. In the case of wind erosion, the source extent is simply the area of erodible surface. For emissions generated by mechanical disturbance, the source extent is also the surface area (or volume) of the material from which the emissions emanate. For vehicle travel, the disturbed surface area is the travel length times the average daily traffic (ADT) count, with each vehicle having a disturbance width equal to the width of a travel lane.

If an anthropogenic control measure (e.g., treating the surface with a chemical binder which forms an artificial crust) is applied to the source, the uncontrolled emission factor in Equation 2 must be multiplied by an additional term to reflect the resulting fractional control. In broad terms, anthropogenic control measures can be considered as either continuous or periodic, as the following examples illustrate:

Continuous controls	Periodic controls
Wet suppression at conveyor transfer points	Watering or chemical treatment of unpaved roads
Enclosures/wind fences around storage piles	Sweeping of paved travel surfaces
Continuous vegetation of exposed areas	Chemical stabilization of exposed areas

The major difference between the two types of controls is related to the time dependency of performance. For continuous controls, the efficiency of the control measure is essentially constant with respect to time. On the other hand, the efficiency associated with periodic controls tends to decrease (decay) with time after application until the next application, at which time the cycle repeats but often with some residual effects from the previous application.

In order to quantify the performance of a specific periodic control, two measures of control efficiency are required. The first is "instantaneous" control efficiency and is defined by:

$$c(t) = \left(1 - \frac{e_c(t)}{e_u}\right) \times 100 \qquad (3)$$

where: $c(t)$ = instantaneous control efficiency (percent)
$e_c(t)$ = instantaneous emission factor for the controlled source
e_u = uncontrolled emission factor
t = time after control application

The other important measure of periodic control performance is average efficiency, defined as:

$$C(T) = \frac{1}{T}\int_0^T c(t)dt \qquad (4)$$

where: $c(t)$ = instantaneous control efficiency at time t after application (percent)
T = time period over which the average control efficiency is referenced

The average control efficiency is needed to estimate the emission reductions due to periodic applications.

1.7 Emission Factors

Early in the USEPA field testing program to develop emission factors for fugitive dust sources, it became evident that uncontrolled emissions within a single generic source category may vary over two or more orders of magnitude as a result of variations in source conditions (equipment characteristics, material properties, and climatic parameters). Therefore, it would not be feasible to represent an entire generic source category in terms of a single-valued emission factor, as traditionally used by the USEPA to describe average emissions from a narrowly defined ducted source operation. In other words, it would take a large matrix of single-valued factors to adequately represent an entire generic fugitive dust source category. In order to account for emissions variability, therefore, the approach was taken that fugitive dust emission factors be constructed as mathematical equations for sources grouped by the dust generation mechanisms. The emission factor equation for each source category would contain multiplicative correction parameter terms that explain much of the variance in observed emission factor values on the basis of variances in specific source parameters. Such factors would be applicable to a wide range of source conditions, limited only by the extent of experimental verification. For example, the use of the silt content as a measure of the dust generation potential of a material acted on by the forces of wind or machinery proved to be an important step in extending the applicability of the emission factor equations to a wide variety of aggregate materials of industrial importance.

A compendium of predictive emission factor equations for fugitive dust sources is maintained on a CD-ROM by the U.S. EPA.[13] These emission factor equations are also published in Volume I of the U.S. EPA's Compilation of Air Pollutant Emission Factors commonly referred to as AP-42.[14] A set of particle size multipliers for adjusting the calculated emission factors to specific particle size fractions is provided with each equation. The ratios of PM2.5 to PM10 for fugitive dust sources published in Section 13 of AP-42 typically range from 0.10 to 0.20.

Example: Vehicle Traffic on Unpaved Roads. For the purpose of estimating uncontrolled emissions, the U.S. EPA emission factor equation applicable to vehicle traffic on publicly accessible unpaved roads takes source characteristics into consideration:

$$E = [1.8\ (s/12)^{1.8}\ (S/30)^{0.5} / (M/0.5)^{0.2}] - C \qquad (5)$$

where: E = PM10 emission factor (lb/VMT)
s = surface material silt content (%)
S = mean vehicle speed (mph)
M = surface material moisture content (%)
C = emission factor for 1980's vehicle fleet exhaust, plus break/tire wear

The denominators in each of the multiplicative terms of the equation constitute normalizing default values, in case no site-specific correction parameter data are available. The default moisture content represents dry (worst-case) road conditions. Extrapolation to annual average uncontrolled emission estimates (including natural mitigation) is accomplished by assuming that emissions are occurring at the estimated rate on days without measurable precipitation and, conversely, are absent on days with measurable precipitation.

1.8 Emission Control Options

Typically, there are several options for the control of fugitive particulate emissions from any given source. This is clear from Equation 2 used to calculate the emission rate. Because the uncontrolled emission rate is the product of the source extent and the uncontrolled emission factor, a reduction in either of these two variables produces a proportional reduction in the uncontrolled emission rate. In the case of open sources, the reduction in the uncontrolled emission factor may be achieved by adjusted "work practices". The degree of the reduction of the uncontrolled emission factor can be estimated from the known dependence of the factor on source conditions that are subject to alteration. For open dust sources, this information is embodied in the predictive emission factor equations for fugitive dust sources as presented in Section 13 of AP-42. The reduction of source extent and the incorporation of adjusted work practices that reduce the amount of exposed dust-producing material are preventive measures for the control of fugitive dust emissions.

Add-on controls can also be applied to reduce emissions by reducing the amount (areal extent) of dust-producing material, other than by cleanup operations. For example, the elimination of mud/dirt carryout onto paved roads at construction and demolition sites is a cost-effective preventive measure. On the other hand, mitigative measures involve the periodic removal of dust-producing material. Examples of mitigative measures include: cleanup of spillage on travel surfaces (paved and unpaved) and cleanup of material spillage at conveyor transfer points. Mitigative measures tend to be less favorable from a cost-effectiveness standpoint.

Periodically applied control techniques for open dust sources begin to decay in efficiency almost immediately after implementation. The most extreme example of this is the watering of unpaved roads, where the efficiency decays from nearly 100% to 0% in a matter of hours. On the other hand, the effects of chemical dust suppressants applied to unpaved roads may last for several months. Consequently, to describe the performance of most intermittent control techniques for open dust sources, the "time-weighted average" control efficiency must be reported along with the time period over which the value applies. For continuous control systems (e.g., wet suppression for continuous drop materials transfer), a single control efficiency is usually appropriate.

Table 1-3 lists fugitive dust control measures that have been judged to be generally cost-effective for application to metropolitan areas unable to meet PM10 standards. The most highly developed performance models available apply to application of chemical suppressants on unpaved roads. These models relate the expected instantaneous control efficiency to the application parameters (application intensity and dilution ratio) and to the number of vehicle passes (rather than time) following the application. More details on available dust control measure performance and cost are presented in two MRI documents.[15, 16]

Table 1-3. Controls for Fugitive Dust Sources

Source category	Control action
Agricultural Tilling and Harvesting, Livestock Husbandry	Conservation management practices
Construction/Demolition	Paving permanent roads early in project Covering haul trucks Access apron construction and cleaning Watering of graveled travel surfaces
Abrasive Blasting, Materials Handling, Mineral Products Industry	Wet suppression
Paved Roads	Water flushing/sweeping Improvements in sanding/salting applications and materials Covering haul trucks Prevention of trackout Curb installation Shoulder stabilization
Unpaved Roads	Paving Chemical stabilization Surface improvement (e.g., gravel) Vehicle speed reduction
Wind Erosion (agricultural, open area, and storage pile)	Revegetation Limitation of off-road vehicle traffic

1.9 Document Organization

The handbook contains separate, stand-alone chapters for each fugitive dust source category with chapters arranged in the following order:

Chapter 2: Agricultural Tilling
Chapter 3: Construction and Demolition
Chapter 4: Materials Handling
Chapter 5: Paved Roads
Chapter 6: Unpaved Roads
Chapter 7: Agricultural Wind Erosion
Chapter 8: Open Area Wind Erosion
Chapter 9: Storage Pile Wind Erosion
Chapter 10: Agricultural Harvesting
Chapter 11: Mineral Products Industry
Chapter 12: Abrasive Blasting
Chapter 13: Livestock Husbandry
Chapter 14: Miscellaneous Minor Fugitive Dust Sources

Each chapter contains the following subsections:

(a) Characterization of Source Emissions
(b) Emissions Estimation: Primary Methodology (generally from AP-42)
(c) Emissions Estimation: Alternate Methodology (if available; e.g., CARB)
(d) Demonstrated Control Techniques
(e) Regulatory Formats
(f) Compliance Tools
(g) Sample Cost-Effectiveness Calculation
(h) References

A glossary and a series of Appendices are included in the handbook. Appendix A contains a discussion of two basic test methods used to quantify fugitive dust emission rates, namely:

(a) The upwind-downwind method that involves the measurement of upwind and downwind particulate concentrations, utilizing ground-based samplers under known meteorological conditions, followed by a calculation of the source strength (mass emission rate) with atmospheric dispersion equations; and
(b) The exposure-profiling method that involves simultaneous, multipoint measurements of particulate concentration and wind speed over the effective cross section of the plume, followed by a calculation of the net particulate mass flux through integration of the plume profiles.

Appendix B contains cost information for demonstrated control measures. Appendix C contains a step-wise methodology to calculate the cost-effectiveness of different fugitive dust control measures. Appendix D contains a brief discussion of fugitive PM10 management plans and record keeping requirements mandated by one of the air quality districts within the WRAP region.

In compiling information regarding control cost-effectiveness estimates (i.e., $ per ton of PM10 reduction) of different control options for the fugitive dust handbook, we discovered that many of the estimates provided in contractor reports prepared for air quality agencies for PM10 SIPs contain either hard to substantiate assumptions or unrealistic assumptions. Depending on what assumptions are used, the control cost-effectiveness estimates can range over one to two orders of magnitude. Consequently, the end user of the handbook would get a distorted view if we published these estimates. Rather than presenting these published cost-effectiveness estimates, we have prepared a detailed methodology containing the steps to calculate cost-effectiveness that is included in Appendix C. We recommend that the handbook user calculate the cost-effectiveness values for different fugitive dust control options based on current cost data and assumptions that are applicable for their particular situation.

1.10 References

1. WRAP, 2004. *Definitions of Dust,* Western Regional Air Partnership, October 21.

2. Environ, 2005. *Feasibility Analysis of the Implementation of WRAP's Dust Definition*, final report to the Western Governors' Association, May 9.

3. Cowherd, C. Jr., Axetell, K. Jr., Maxwell, C.M., Jutze, G.A., 1974. *Development of Emission Factors for Fugitive Dust Sources,* EPA-450/3-74/037.

4. ASTM, 1984. American Society of Testing and Materials, Standard Method for Sieve Analysis of Fine and Coarse Aggregates, Method C-136, 84a.

5. Cowherd, C. Jr., Bohn, R., Cuscino, T. Jr., 1979. *Iron and Steel Plant Open Source Fugitive Emission Evaluation,* EPA-600/2-79/1 03.

6. Woodruff, N.P. Siddoway, F.H., 1965. *A Wind Erosion Equation*, Soil Sci. Soc. Am. Proc. 29(5): 602-8.

7. Cowherd, C. Jr., Muleski, G.E., Englehart, P.J., Gillette, D.A., 1985. *Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites,* EPA/600/8-85/002.

8. Gillette, D.A., 1978. *A Wind Tunnel Simulation of the Erosion of the Soil*, Atmos. Environ., 12: 1735-43.

9. Cowherd, C. Jr., 1988. A Refined Scheme for Calculation of Wind Generated PM Emissions from Storage Piles, in *Proceedings: APCA/EPA Conference on PM10: Implementation of Standards*.

10. NEDS, 1992. Local Climatological Data: Annual and Monthly Summaries, National Environmental Data Service, National Climatic Center, Asheville, NC.

11. Billings-Stunder, B.J. and Arya, S.P.S., 1988. *Windbreak Effectiveness for Storage Pile Fugitive Dust Control: A Wind Tunnel Study*, J. APCA 38: 135-43.

12. MRI, 2005. *Remote Sensing Imagery for an Inventory of Vacant Land Soil Stability and Unpaved Private Roads*, final report prepared for Clark County, Nevada, December.

13. U.S. EPA, 2005. Air CHIEF CD-ROM, Version 12, Research Triangle Park, NC.

14. USEPA, 2006. Compilation of Air Pollutant Emission Factors, Volume I: Stationary and Area Sources, Research Triangle Park, NC.

15. Cowherd, C. Jr., Muleski, G.E., Kinsey, J.S., 1988. *Control of Open Fugitive Dust Sources,* EPA 450/3-88-008.

16. Cowherd, C. Jr., 1991. *Best Available Control Measures (BA CM) for Fugitive Dust Sources.* Revised Draft Guidance Document.

Chapter 2. Agricultural Tilling

2.1 Characterization of Source Emissions 2-1
2.2 Emission Estimation: Primary Methodology 2-1
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2.1 Characterization of Source Emissions

The agricultural tilling source category includes estimates of the airborne soil particulate emissions produced during the preparation of agricultural lands for planting and after harvest activities. Operations included in this methodology are discing, shaping, chiseling, leveling, and other mechanical operations used to prepare the soil. Dust emissions are produced by the mechanical disturbance of the soil by the implement used and the tractor pulling it. Soil preparation activities tend to be performed in the early spring and fall months. Particulate emissions from land preparation are computed by multiplying a crop specific emission factor by an activity factor. The crop specific emission factors are calculated using operation specific (i.e., discing or chiseling) emission factors which are combined with the number of operations provided in the crop calendars. The activity factor is based on the harvested acreage of each crop for each county in the state. In addition, acre-passes are computed, which are the number of passes per acre that are typically needed to prepare a field for planting a particular crop. The particulate dust emissions produced by agricultural land preparation operations are estimated by combining the crop acreage and the operation specific emission factor.

The current version of AP-42 (i.e., the 5th edition) does not address agricultural tilling even though an earlier edition (i.e., the 4th edition) included a PM10 emission factor equation for this fugitive dust source category expressed as follows:

$$EF = 1.01\ s^{0.6}$$

where, EF is the PM10 emission factor (lb/acre-pass) and s is the silt content of surface soil (%). Thus, the methodology adopted by the California Air Resources Board (CARB) is presented below as the primary emissions estimation methodology in lieu of an official EPA methodology for this fugitive dust source category.

2.2 Emission Estimation: Primary Methodology[1-5]

This section was adapted from Section 7.4 of CARB's Emission Inventory Methodology. Section 7.4 was last updated in January 2003.

The particulate dust emissions from agricultural land preparation are estimated for each crop in each county using the following equation.

$$Emissions_{crop} = Emission\ Factor_{crop} \times Acres_{crop}$$

Then the crop emissions for each county are summed to produce the county and statewide PM10 and PM2.5 emission estimates. The remainder of this section discusses each component of the above equation.

Acres. The acreage data used for estimating land preparation emissions are based on the state summary of crop acreage harvested. The acreage data are subdivided by county and crop type for the entire state, and are compiled from individual county agricultural commissioner reports.

Crop Calendars and Acre-Passes. Acre-passes (the total number of passes typically performed to prepare land for planting during a year) are used in computing crop specific emission factors for land preparation. These land preparation operations may occur following harvest or closer to planting, and can include discing, tilling, land leveling, and other operations. Each crop is different in the type of soil operations performed and when they occur. For the crops that are not explicitly updated, an updated crop profile from a similar crop can be used. For updating acre-pass data, it is also useful to collect specific information on when agricultural operations occur. Using these data, it is possible to create detailed temporal profiles that help to indicate when PM emissions from land preparations may be highest.

Emission Factor. The operation specific PM10 emission factors used to estimate the crop specific emission factor for agricultural land preparations were initially extracted from a University of California Davis report.[4] After discussions with regulators, researchers, and industry representatives, the emission factors were adjusted based on a combination of scientific applicability, general experience, and observations. Five emission factors were developed by UC Davis using 1995 to 1998 test data measured in cotton and wheat fields in California. The operations tested included root cutting, discing, ripping and subsoiling, land planing and floating, and weeding, which produced emission factors that are summarized in Table 2-1 below. CARB has recently proposed adopting a PM2.5/PM10 ratio for fugitive dust from agricultural tilling and related land preparation activities of 0.15 based on the analysis conducted by MRI on behalf of WRAP.[5, 6]

Table 2-1. Land Preparation Emission Factors

Land preparation operations	Emission factor (lbs PM10/acre-pass)
Root cutting	0.3
Discing, Tilling, Chiseling	1.2
Ripping, Subsoiling	4.6
Land Planing & Floating	12.5
Weeding	0.8

There are more than thirty different land preparation operations commonly used. With five emission factors available, the other operations can be assigned "best-fit" factors based on similar potential emission levels. The assignment of emission factors for operations are based on the expertise and experience of regulators, researchers, and industry representatives. For each crop, the emission factor is the sum of the acre-pass weighted emission factors for each land preparation operation.

Assumptions and Limitations. The CARB methodology is subject to the following assumptions and limitations:

1. The land preparation emission factors for discing, tilling, etc., are assumed to produce the same level of emissions, regardless of the crop type.
2. The land preparation emission factors do not change geographically for counties.

3. A limited number of emission factors are assigned to all land preparation activities.
4. Crop calendar data collected for test area (i.e., San Joaquin) crops and practices were extrapolated to the same crops in the remainder of the state. Existing crop profiles were used for the small percentage of crops in which update information was not collected.
5. In addition to the activities provided in the crop calendars, it is also assumed that field and row crop acreage receive a land-planing pass once every five years.

Temporal Activity. Temporal activity for agricultural tilling (and other land preparation activities) is derived by summing, for each county, the monthly emissions from all crops. For each crop, the monthly emissions are calculated based on its monthly crop calendar profile, which reflects the percentage of activities that occurs in that month. An example of the monthly activity profile for almonds, cotton, and wine grapes is shown below in Table 2-2. Because the mix of crops varies by county, composite temporal profiles combining all of the other county crops vary by county. An example of a composite land preparation profile by month for Fresno County, showing the combined temporal profile for all of the land preparation activities in the county, is shown in Table 2-3.

Table 2-2. Monthly Activity Profile of Selected Crops

Crops	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC
Almonds	0	0	0	0	0	0	0	0	0	0	50	50
Cotton	0	9	9	0	0	0	0	0	0	0	41	41
Grapes-wine	0	0	0	4	16	16	12	12	12	28	0	0

Table 2-3. County Land Preparation Profile Composite

County	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC
Fresno	3	6	6	2	2	1	3	4	2	12	30	29

2.3 Demonstrated Control Techniques

The emission potential of agricultural land preparation operations, including soil tilling, is affected by the soil management and cropping systems that are in place. Table 2-4 presents a summary of demonstrated control measures and the associated PM10 control efficiencies. It is readily observed that reported control efficiencies for many of the control measures are highly variable. This may reflect differences in the operations as well as the test methods used to determine control efficiencies. A list of control measures for agricultural tilling operations is available from the California Air Pollution Control Officers' Association's (CAPCOA) agricultural clearinghouse website (http://capcoa.org/ag_clearinghouse.htm). The list of control measures for land preparation activities for field and orchard crops include: ceasing activities under very windy conditions, combining operations to reduce the number of passes, application of chemicals through an irrigation system, fallowing land, use cover crops and/or mulch/crop residue to reduce wind erosion of soil, operating at night when moisture levels are higher and winds tend to be lighter, precision farming with a GPS system to

reduce overlap of passes, roughening the soil or establishing ridges perpendicular to the prevailing wind direction, and using wind barriers.

Table 2-4. Control Efficiencies for Control Measures for Agricultural Tilling[7-11]

Control measure	PM10 control efficiency	References/Comments
Equipment modification	50%	MRI, 1981. Control efficiency is for electrostatically charged fine-mist water spray.
Limited activity during a high-wind event	1 - 5%	SCAQMD, 1997. Control efficiency assumes no tilling when wind speed exceeds 25 mph.
Reduced tillage system (Conservation Tilling)	35 - 50%	Coates, 1994. This study identified total PM10 emissions generated for five different cotton tillage systems, including conventional tilling. Four of the systems combine several tillage operations (e.g., shredding, discing, mulching).
	60%	MRI, 1981. Control efficiency is for a minimum tillage technique that confines farm equipment and vehicle traffic to specific areas (for cotton and tomatoes).
	25 - 100%	MRI, 1981; U.S. EPA, 1992. Control efficiency is for application of herbicide that reduces need for cultivation (i.e., 25% for barley, alfalfa, and wheat; 100% for cotton, corn, tomatoes, and lettuce).
	30%	MRI, 1981; U.S. EPA, 1992. Control efficiency is for laser-directed land plane that reduces the amount of land planing.
	50%	MRI, 1981; U.S. EPA, 1992. Control efficiency is for using "punch" planter instead of harrowing (for cotton, corn, and lettuce).
	50%	MRI, 1981. Control efficiency is for using "plug" planting that places plants more exactly and eliminates the need for thinning (for tomatoes, only).
	50%	MRI, 1981; U.S. EPA, 1992. Control efficiency is for aerial seeding which produces less dust than ground planting (for alfalfa and wheat).
	91 - 99%	Grantz, et al. 1998. Control efficiency is for revegetation of fallow agricultural lands by direct seeding.
Tillage based on soil moisture	90%	MRI, 1981; U.S. EPA, 1992. Control efficiency is for sprinkler irrigation as a fugitive dust control measure. Also, sprinkler irrigation could reduce the need for extensive land planing associated with surface irrigation.
Sequential cropping	50%	MRI, 1981. Control efficiency is for double cropping corn.
Surface roughening	15 - 64%	Grantz et al, 1998. Control efficiency is for increasing surface roughness using rocks and soil aggregates.

2.4 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. However, most air quality districts currently exempt agricultural operations from controlling fugitive dust. Air quality districts that regulate fugitive dust emissions from agricultural operations include Clark County, NV and several districts in California such as the Imperial County APCD, the San Joaquin Valley APCD and the South Coast AQMD. Imperial County APCD's Rule 806 prohibits fugitive dust emissions from farming activities for farms over 40 acres. The San Joaquin Valley APCD and the South Coast AQMD prohibit fugitive dust emissions for the larger farms defined as farms with areas where the combined disturbed surface area within one continuous property line and not separated by a paved public road is greater than 10 acres. The San Joaquin Valley APCD's Rule 4550 (Conservation Management Practices, CMPs) requires farmers with 100 acres or more of contiguous or adjacent farmland to implement and document a biennial CMP plan to reduce fugitive dust emissions from on-farm sources, such as unpaved roads and equipment yards, during land preparation and harvesting activities. The District's rule requires farmers to implement a separate CMP for each crop for the following source categories: land preparation and cultivation, harvesting, unpaved roads, unpaved equipment yards, and other cultural practices. Example regulatory formats downloaded from the Internet are presented in Table 2-5. The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- San Joaquin Valley APCD, CA: valleyair.org/SJV_main.asp
- South Coast AQMD, CA: aqmd.gov/rules
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: www.maricopa.gov/aq

CAPCOA's agricultural clearinghouse website (capcoa.org/ag_clearinghouse.htm) provides links to rules of different air quality agencies within California that regulate fugitive dust emissions from agricultural operations.

Table 2-5. Example Regulatory Format for Agricultural Tilling

Control measure	Agency
Any person engaged in agricultural operations shall take all reasonable precautions to abate fugitive dust from becoming airborne from such activities.	Clark County Reg. 41 7/10/04
Limit visible dust emissions to 20% opacity by pre-watering, phasing of work, applying water during active operations	SJVAPCD Rule 8021 11/15/2001
Implement one of following during inactivity: restricting vehicle access or applying water or chemical stabilizers	SJVAPCD Rule 8021 11/15/2001
Use mowing or cutting instead discing and maintain at least 3" stubble above soil (Also requires pre-application of watering if discing for weed abatement)	SCAQMD Rule 403 12/11/1998
Cease activities when wind speeds are greater than 25 mph	SCAQMD Rule 403.1 4/02/04

2.5 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations (e.g., observation of visible dust plume). An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Compliance tools applicable to agricultural tilling are summarized in Table 2-6.

Table 2-6. Compliance Tools for Agricultural Tilling

Record keeping	Site inspection/monitoring
Maintain daily records to document the specific dust control options taken; maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request.	Observation of dust plumes during periods of agricultural tilling; observation of dust plume opacity (visible emissions) exceeding a standard; observation of high winds (e.g., >25 mph).

2.6 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for agricultural tilling. A sample cost-effectiveness calculation is presented below for a specific control measure (conservation tilling) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous control measure for agricultural tilling, the same procedure is used to evaluate each candidate control measure (utilizing the control

measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Agricultural Tilling

Step 1. Determine source activity and control application parameters.

Field size (acres)	320
Frequency of operations per year	4
Control Measure	Conservation tilling
Control application/frequency	Reduce 4 passes to 3 passes
Control Efficiency	25%

The field size and frequency of operations are assumed values, for illustrative purposes. Conservation tilling has been chosen as the applied control measure. The control application/frequency and control efficiency are values determined from the proportional reduction in tilling frequency.

Step 2. Obtain PM10 Emission Factor.
The PM10 emission factor for agricultural tilling dust is 1.2 (lb/acre-pass).[12]

Step 3. Calculate Uncontrolled PM Emissions. The PM10 emission factor, EF, (given in Step 2) is multiplied by the field size and the frequency of operations (both under activity data) and then divided by 2,000 lbs to compute the annual PM10 emissions in tons per year, as follows:

Annual PM10 emissions = (EF x Field Size x Frequency of Ops) / 2,000
Annual PM10 emissions = (1.2 x 320 x 4) / 2,000 = 0.768 tons

Annual PM2.5 emissions = (PM2.5/PM10) x PM10 emissions
CARB proposed PM2.5/PM10 ratio for agricultural operations[5] = 0.15
Annual PM2.5 emissions = (0.15 x 0.768 tons) = 0.115 tons

Step 4. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) are equal to the uncontrolled emissions (calculated above in Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency).

For this example, we have selected conservation tilling as our control measure. Based on a control efficiency estimate of 25%, the annual controlled PM emissions are calculated to be:

Annual Controlled PM10 emissions = (0.768 tons) x (1 – 0.25) = 0.576 tons
Annual Controlled PM2.5 emissions = (0.115 tons) x (1 – 0.25) = 0.086 tons

Step 5. Determine Annual Cost to Control PM Emissions.

In this example, eliminating one tilling pass actually reduces the annual tilling costs. The annual cost savings of this control measure is calculated by multiplying the number of acres by the tilling cost per acre. The cost of tilling is assigned a value of $10 per acre (WSU, 1998[13]). Thus, the annual cost savings from eliminating one tilling pass is estimated to be: 320 x 10 = $3,200.

Step 6. Calculate Cost-effectiveness. Cost-effectiveness is calculated by dividing the annual cost (in this case annual cost savings) by the emissions reduction (i.e., uncontrolled emissions minus uncontrolled emissions), as follows:

Cost-effectiveness = Annual Costs Savings / (Uncontrolled emissions – Controlled emissions)

Cost-effectiveness for PM10 emissions = -$3,200 / (0.687 – 0.576) = -$16,667/ton
Cost-effectiveness for PM2.5 emissions = –$3,200 / (0.115 – 0.086) = –$111,111/ton

[Note: The negative cost-effectiveness values indicate a net cost savings for this control measure.]

2.7 References

1. Flocchini, R. G., James, T. A., et al., 2001. *Sources and Sinks of PM10 in the San Joaquin Valley,* Interim Report for U.S. Department of Agriculture.

2. California Agricultural Statistics Service, 2002. 2000 acreage extracted from agricultural commissioner's reports, Sacramento, CA, December.

3. Gaffney, P. H., Yu, H., 2002. *Agricultural Harvest: Geologic Particulate Matter Emission Estimates*, Background Document prepared by the California Air Resources Board, December.

4. Cassel, T., 2002. *Evaluation of ARB application of UCD emission factors,* prepared for San Joaquin Valley Ag Tech Committee, July 12.

5. CARB, 2006. Private communication between Patrick Gaffney and Richard Countess, Tom Pace and Chat Cowherd, July 6.

6. MRI, 2006. Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Emission Factors, prepared for the WRAP by Midwest Research Institute, Project No. 110397, February 1.

7. Coates, W., 1994. *Cotton Tillage/Quantification of Particulate Emissions,* Final Report prepared for Arizona Department of Environmental Quality Air Assessment Division by the University of Arizona Tucson.

8. Grantz, D.A., Vaughn, D.L., R.J., Kim, B., VanCuren, T., Campbell, D., 1998. California Agriculture, Vol. 52, Number 4, Pages 8-13, July-August.

9. MRI, 1981. *The Role of Agricultural Practices in Fugitive Dust Emissions*, Draft Final Report prepared for California Air Resources Board by Midwest Research Institute, Project No. 4809-L, April 17.

10. SCAQMD, 1997. *Air Quality Management Plan, Appendix IV-A: Stationary and Mobile Source Control Measures, CM#97BCM-04*, South Coast AQMD, Diamond Bar, CA, February.

11. U.S. EPA, 1992. *Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.* U.S. EPA, Research Triangle Park, NC, September.

12. CARB, 2003. *Emission Inventory Procedural Manual Volume III: Methods for Assessing Area Source Emissions,* California Air Resources Board, Sacramento, CA, November.

13. WSU, 1998. *Farming with the Wind*, Washington State University College of Agriculture and Home Economics Miscellaneous Publication N.MISC0208, December.

Chapter 3. Construction and Demolition

3.1 Characterization of Source Emissions 3-1
3.2 Emissions Estimation: Primary Methodology 3-2
3.3 Emission Estimation: Alternate Methodology for Building Construction 3-8
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3.1 Characterization of Source Emissions

Heavy construction is a source of dust emissions that may have a substantial temporary impact on local air quality. Building and road construction are two examples of construction activities with high emissions potential. Emissions during the construction of a building or road can be associated with land clearing, drilling and blasting, ground excavation, cut and fill operations (i.e., earth moving), and construction of a particular building or road. Dust emissions often vary substantially from day to day, depending on the level of activity, the specific operations, and the prevailing meteorological conditions. A large portion of the emissions results from construction vehicle traffic over temporary roads at the construction site.

The temporary nature of construction differentiates it from other fugitive dust sources as to estimation and control of emissions. Construction consists of a series of different operations, each with its own duration and potential for dust generation. In other words, emissions from any single construction site can be expected (1) to have a definable beginning and an end, and (2) to vary substantially over different phases of the construction process. This is in contrast to most other fugitive dust sources where emissions are either relatively steady or follow a discernable annual cycle. Furthermore, there is often a need to estimate areawide construction emissions without regard to the actual plans of any individual construction project. For these reasons, methods by which either areawide or site-specific emissions may be estimated are presented below.

The quantity of dust emissions from construction operations is proportional to the area of land being worked and to the level of construction activity. By analogy to the parameter dependence observed for other similar fugitive dust sources, one can expect emissions from construction operations to be positively correlated with the silt content of the soil (i.e., particles smaller than 75 micrometers [μm] in diameter), as well as with the speed and weight of the construction vehicle, and to be negatively correlated with the soil moisture content.

Table 3-1 displays the dust sources involved with construction. In addition to the on-site activities shown in Table 3-1, substantial emissions are possible because of material tracked out from the site and deposited on adjacent paved streets. Because all traffic passing the site (i.e., not just that associated with the construction) can resuspend the deposited material, this "secondary" source of emissions may be far more important than all the dust sources located within the construction site. Furthermore, this secondary source will be present during all construction operations. Persons developing construction site emission estimates must consider the potential for increased adjacent emissions from off-site paved roadways (see Chapter 5). High wind events also can lead to emissions from cleared land and material stockpiles. Chapters 8 and 9 present estimation methodologies that can be used for such sources at construction sites.

Table 3-1. Emission Sources for Construction Operations

Construction phase	Dust-generating activities
I. Demolition and debris removal	1. Demolition of buildings or other (natural) obstacles such as trees, boulders, etc. a. Mechanical dismemberment ("headache ball") of existing structures b. Implosion of existing structures c. Drilling and blasting of soil d. General land clearing 2. Loading of debris into trucks 3. Truck transport of debris 4. Truck unloading of debris
II. Site Preparation (earth moving)	1. Bulldozing 2. Scrapers unloading topsoil 3. Scrapers in travel 4. Scrapers removing topsoil 5. Loading of excavated material into trucks 6. Truck dumping of fill material, road base, or other materials 7. Compacting 8. Motor grading
III. General Construction	1. Vehicular Traffic 2. Portable plants a. Crushing b. Screening c. Material transfers 3. Other operations

3.2 Emissions Estimation: Primary Methodology[1-6]

This section was adapted from: Estimating Particulate Matter Emissions from Construction Operations, report prepared for USEPA by Midwest Research Institute dated September 15, 1999.[1]

Note that AP-42 Section 13.2.3, "Heavy Construction Operations," was not adopted for the primary emission estimation methodology because it relies on a single-valued emission factor for TSP of 1.2 tons/acre-month based on only one set of field tests.[2]

3.2.1 PM Emissions from Construction

Construction emissions can be estimated when two basic construction parameters are known: the acres of land disturbed by the construction activity, and the duration of the activity. A general emission factor for all types of construction activity is 0.11 tons PM10/acre-month and is based on a 1996 BACM study conducted by Midwest Research (MRI) Institute for the California South Coast Air Quality Management District (SCAQMD).[3] The single composite factor of 0.11 tons PM10/acre-month assumes that all construction activity produces the same amount of dust on a per acre basis. In other words, the amount of dust produced is not dependent on the type of construction but merely on the area of land being disturbed by the construction activity. A second

assumption is that land affected by construction activity does not involve large-scale cut and fill operations. Factors for the conversion of dollars spent on construction to acreage disturbed, along with the estimates for the duration of construction activity, were originally developed by MRI in 1974.[4]

Separate emission factors segregated by type of construction activity provide better estimates of PM10 emissions that are more accurate estimate than are obtained using a general emission factor. The factors from the 1996 MRI BACM study[3] are summarized in Table 3-2. Specific emission factors and activity levels for residential, nonresidential, and road construction activities are described below.

Table 3-2. Recommended PM10 Emission Factors for Construction Operations[1]

Basis for emission factor	Recommended PM10 emission factor
Level 1 Only area and duration known	0.11 ton/acre-month (average conditions) 0.42 ton/acre-month (worst-case conditions)[a]
Level 2 Amount of earth moving known, in addition to total project area and duration	0.011 ton/acre-month for general construction (for each month of construction activity) plus 0.059 ton/1,000 cubic yards for on-site cut/fill[b] 0.22 ton/1,000 cubic yards for off-site cut/fill[b]
Level 3 More detailed information available on duration of earth moving and other material movement	0.13 lb/acre-work hr for general construction plus 49 lb/scraper-hr for on-site haulage[c] 94 lb/hr for off-site haulage[d]
Level 4 Detailed information on number of units and travel distances available	0.13 lb/acre-work hr for general construction plus 0.21 lb/ton-mile for on-site haulage 0.62 lb/ton-mile for off-site haulage[c]

[a] Worst-case refers to construction sites with active large-scale earth moving operations.

[b] These values are based on assumptions that one scraper can move 70,000 cubic yards of earth in one month and one truck can move 35,000 cubic yards of material in one month. If the on-site/off-site fraction is not known, assume 100% on-site.

[c] If the number of scrapers in use is not knows, MRI recommends that a default value of 4 be used. In addition, if the actual capacity of earth moving units is known, the user is directed to use the following emission rates in units of lb/scraper-hour for different capacity scrapers: 19 for 10 yd^3 scraper, 45 for 20 yd^3 scraper, 49 for 30 yd^3 scraper, and 84 for 45 yd^3 scraper.

[d] Factor for use with over-the-road trucks. If "off-highway" or "haul" trucks are used, haulage should be considered "on-site."

3.2.2 Residential Construction

Residential construction emissions can be calculated for three basic types of residential construction:

- Single-family houses
- Two-family houses
- Apartment buildings

Housing construction emissions are calculated using an emission factor of 0.032 tons PM10/acre-month. Also required are: the number of housing units created, a units-to-acres conversion factor, and the duration of construction activity. The formula for calculating emissions from residential construction is:

$$\text{Emissions} = (0.032 \text{ tons PM10/acre-month})\ B \times f \times m$$

where, B = the number of houses constructed
f = building to acres conversion factor
m = the duration of construction activity in months

Following the California methodology, residential construction acreage is based on the number of housing units constructed rather than the dollar value of construction.

An alternative methodology is recommended for residential construction in areas in which basements are constructed or the amount of dirt moved at a residential construction site is known. The F.W. Dodge reports (www. fwdodge.com/newdodgenews.asp) give the total square footage of homes for both single-family and two-family homes. These values can be used to estimate the volume in cubic yards of dirt moved. Multiplying the total square footage of the homes by an average basement depth of 8 ft, and adding 10% additional volume to account for peripheral dirt removed for footings, space around the footings, and other backfilled areas adjacent to the basement, produces an estimate of the total volume in cubic yards of earth moved during residential construction.

The information needed to determine activity levels of residential construction may be based either on the dollar value of construction or the number of housing units constructed. Construction costs vary throughout the United States. The average home cost can vary from the low to upper $100,000s depending on where the home is located in the United States. Because residential construction characteristics do not show as much variance as the cost does, the number of units constructed is a better indicator of activity level. The amount of land impacted by residential construction is determined to be about the same on a per house basis. The number of housing units for the three types of residential construction (single family, two-family, and apartments) for a county or state are available from the F.W. Dodge's "Dodge Local Construction Potentials Bulletin."

A single-family house is estimated to occupy 1/4 acre. The "building to acres" conversion factor for a single-family house was determined by finding the area of the base of a home and estimating the area of land affected by grading and other construction activities beyond the "footprint" of the house. The average home is around 2,000 sq. ft. Using a conversion factor of 1/4 acre/house indicates that five times the base of the house is affected by the construction of the home. The "building to acres" conversion factor for two-family housing was found to be 1/3 acre per building. The 1/3 acre was derived from the average square footage of a two-family home (approximately 3,500 sq. ft.) and the land affected beyond the base of the house, about 4 times the base for two-family residences.

For comparison purposes, residential construction emission factor calculations are calculated below for BACM Level 1 and Level 2 scenarios. The PM10 construction emission factor for one single-family home is based on typical parameters for a single-family home:

- area of land disturbed 1/4 acre
- area of home 2,000 sq. ft.
- duration 6 months
- basement depth 8 ft.
- moisture level 6%
- silt content 8%

The BACM Level 1 emission calculation is estimated as follows:

0.032 tons PM10/acre-month x 1/4 acre x 6 months = 0.048 tons PM10 = 96 lb PM10

The BACM Level 2 emission calculation is estimated as follows:

Cubic yards of dirt moved = 2,000 ft^2 x 8 ft. x 110% = 17,600 ft^3 = 652 yd^3
PM10 = (0.011 tons/acre-month x 1/4 acre x 6 months) + (0.059 tons/1000 yd^3 dirt x 652 yd^3 dirt)
= 0.016 tons + 0.038 tons = 0.0545 tons PM10 = 109 lb PM10

The emission factor recommended for the construction of apartment buildings is 0.11 tons PM10/acre-month because apartment construction does not normally involve a large amount of cut-and-fill operations. Apartment buildings vary in size, number of units, square footage per unit, floors, and many other characteristics. Because of these variations and the fact that most apartment buildings occupy a variable amount of space, a "dollars-to-acres" conversion is recommended for apartment building construction rather than a "building-to-acres" conversion factor. An estimate of 1.5 acres/$\$10^6$ (in 2004 dollar value) is recommended to determine the acres of land disturbed by the construction of apartments. This "dollars-to-acres" conversion factor is based on updating previous conversion factors developed by MRI[4, 5] using cost of living adjustment factors.

3.2.3 Nonresidential Construction

Nonresidential construction includes building construction (commercial, industrial, institutional, governmental) and also public works. The emissions produced from the construction of nonresidential buildings are calculated using the dollar value of the construction. The formula for calculating the emissions from nonresidential construction is:

PM10 Emissions = (0.19 tons PM10/acre-month) x $ x f x m

where, $ = dollars spent on nonresidential construction in millions
f = dollars to acres conversion factor
m = duration of construction activity in months

The emission factor of 0.19 tons PM10/acre-month was developed by MRI in 1999 using a method similar to a procedure originated by Clark County, Nevada and the emission factors recommended in the 1996 MRI BACM Report.[3] A quarter of all nonresidential construction is assumed to involve active earthmoving in which the recommended emission factor is 0.42 tons PM10/acre-month. The 0.19 tons PM10/acre-month was calculated by taking 1/4 of the heavy emission factor, (0.42 tons PM10/acre-month) plus 3/4 of the general emission factor (0.11 tons/acre-month). The 1/4:3/4 apportionment is based on a detailed analysis of a Phoenix airport construction where specific unit operations had been investigated for PM10 emissions.[6] The proposed emission factor of 0.19 tons/acre-month for nonresidential building construction resulted in a total uncontrolled PM10 emissions estimate that was within 25% of that based on a detailed unit operation emissions inventory using detailed engineering plans and "unit-operation" emission factors.

Extensive earthmoving activities will produce higher amounts of PM10 emissions than the average construction project. Thus, a worst-case BACM "heavy construction emission factor" of 0.42 tons PM10/acre-month should provide a better emissions estimate for areas in which a significant amount of earth is disturbed.

The dollar amount spent on nonresidential construction is available from the U.S. Census Bureau (www.census.gov/prod/www/abs/cons-hou), and the Dodge Construction Potentials Bulletin (www. fwdodge.com/newdodgenews.asp). Census data are delineated by SIC Code, whereas the Potentials Bulletin divides activity by the types of building being constructed rather than by SIC Code. It is estimated that for every million dollars spent on construction (in 2004 dollars), 1.5 acres of land are impacted. The "dollars to acres" conversion factor reflects the current dollar value using the Price and Cost Indices for Construction that are available from the Statistical Abstract of the United States, published yearly. The estimate for the duration of nonresidential construction is 11 months.

3.2.4 Road Construction

Road construction emissions are highly correlated with the amount of earthmoving that occurs at a site. Almost all roadway construction involves extensive earthmoving and heavy construction vehicle travel, causing emissions to be higher than found for other construction projects. The PM10 emissions produced by road construction are calculated using the BACM recommended emission factor for heavy construction[1] and the miles of new roadway constructed. The formula used for calculating roadway construction emissions is:

$$\text{PM10 Emissions} = (0.42 \text{ tons PM10/acre-month}) \times M \times f \times d$$

where, M = miles of new roadway constructed
f = miles to acres conversion factors
d = duration of roadway construction activity in months

The BACM worst case scenario emission factor of 0.42 tons/acre-month is used to account for the large amount of dirt moved during the construction of roadways. Since most road construction consists of grading and leveling the land, the higher emission factor more accurately reflects the high level of cut and fill activity that occurs at road construction sites.

The miles of new roadway constructed are available at the state level from the *Highway Statistics* book published yearly by the Federal Highway Administration (FHWA; www.fhwa.dot.gov/ohim/hs97/hm50.pdf) and the Bureau of Census Statistical Abstract of the United States. The miles of new roadway constructed can be found by determining the change in the miles of roadway from the previous year to the current year. The amount of roadway constructed is apportioned from the state to the county level using housing start data that is a good indicator of the need for new roads.

The conversion of miles of roadway constructed to the acres of land disturbed is based on a method developed by the California Air Resources Board. This calculation is performed by estimating the overall width of the roadway, then multiplying the width by a mile to determine the acres affected by one mile of roadway construction. The California "miles to acres disturbed" conversion factors are available for freeway, highway and city/county roads. In the Highway Statistics book, roadways are divided into separate functional classes. MRI developed a "miles-to-acres" conversion factor in 1999[1] according to the roadway types found in the "Public Road Length, Miles by Functional System" table of the annual *Highway Statistics*. The functional classes are divided into four groups. Group 1 includes Interstates and Other Principal Arterial roads and is estimated to occupy 15.2 acres/mile. Group 2 includes Other Freeways and Expressways (Urban) and Minor Arterial Roads and is estimated at 12.7 acres/mile. Group 3 has Major Collectors (Rural) and Collectors (Urban) and a conversion factor of 9.8 acres/mile. Minor Collectors (Rural) and Local roads are included in Group 4 and converted at 7.9 acres/mile. Table 3-3 shows the data used to calculate the acres per mile of road constructed.

Table 3-3. Conversion of Road Miles to Acres Disturbed

	Group 1	Group 2	Group 3	Group 4
Lane Width (feet)	12	12	12	12
Number of Lanes	5	5	3	2
Average Shoulder Width (feet)	10	10	10	8
Number of Shoulders	4	2	2	2
Roadway Width* (feet)	100	80	56	40
Area affected beyond road width	25	25	25	25
Width Affected (feet)	125	105	81	65
Acres Affected per Mile of New Roadway	15.2	12.7	9.8	7.9

* Roadway Width= (Lane Width x # of Lanes) + (Shoulder Width x # of Shoulders).

The amount of new roadway constructed is available on a yearly basis and the duration of the construction activity is determined to be 12 months. The duration accounts for the amount of land affected during that time period and also reflects the fact that construction of roads normally lasts longer than a year. The duration of construction of a new roadway is estimated at 12 to 18 months.

3.3 Emission Estimation: Alternate Methodology for Building Construction

This section was adapted from Section 7.7 of CARB's Emission Inventory Methodology. Section 7.7 was last updated in September 2002.

The building construction dust source category provides estimates of the fugitive dust particulate matter caused by construction activities associated with building residential, commercial, industrial, institutional, or governmental structures. The emissions result predominantly from site preparation work, which may include scraping, grading, loading, digging, compacting, light-duty vehicle travel, and other operations. Dust emissions from construction operations are computed by using a PM10 emission factor developed by MRI during 1996.[3] The emission factor is based on observations of construction operations in California and Las Vegas. Activity data for construction is expressed in terms of acre-months of construction. Acre-months are based on estimates of the acres disturbed for residential construction, and project valuation for other non-residential construction.

3.3.1 Emission Estimation Methodology

Emission Factor. The PM10 emission factor used for estimating geologic dust emissions from building construction activities is based on work performed by MRI[3] under contract to the PM10 Best Available Control Measure (BACM) working group. For most parts of the state, the emission factor used is 0.11 tons PM10/acre-month of activity. This emission factor is based on MRI's observation of the types, quantity, and duration of operations at eight construction sites (three in Las Vegas and five in California). The bulk of the operations observed were site preparation-related activities. The observed activity data were then combined with operation-specific emission factors provided in AP-42[2] to produce site emissions estimates. These site estimates were then combined to produce the overall average emission factor of 0.11 tons PM10/acre-month. The PM2.5/PM10 ratio for fugitive dust from construction and demolition activities is 0.1 based on the analysis conducted by MRI on behalf of WRAP.[7]

The construction emission factor is assumed to include the effects of typical control measures such as routine watering. A dust control effectiveness of 50% is assumed from these measures, which is based on the estimated control effectiveness of watering.[8] Therefore, if this emission factor is used for construction activities where watering is not used, it should be doubled to more accurately reflect the actual emissions. The MRI document[3] lists their average emission factor values as uncontrolled. However, it can be argued that the activities observed and the emission estimates do include the residual effects of control. All of the test sites observed were actual operations that used watering controls as part of their standard industry practice in California and Las Vegas. So, even if in some cases watering was not performed during MRI's actual site visits, the residual decreases in emissions from the watering controls and raising the soil moisture are included in the MRI estimates.

The 1996 MRI report[3] also includes an emission factor for worst-case emissions of 0.42 tons PM10/acre-month. This emission factor is appropriate for large-scale construction operations, which involve substantial earthmoving operations. The South Coast Air Quality Management District (SCAQMD) estimated that 25% of their construction projects involve these types of operations. For the remainder of the state, such detailed information is not readily available, so the average emission factor of 0.11 tons PM10/acre-month is used by CARB for these other areas of California..

Activity Data. For the purpose of estimating emissions, it is assumed that the fugitive dust emissions are related to the acreage affected by construction. Because regionwide estimates of the acreage under construction may not be directly available, other construction activity data can be used to derive acreage estimates. Activity data are estimated separately for residential construction and the other types of construction (commercial, industrial, institutional, and governmental).

For residential construction, the number of new housing units estimated by the California Department of Finance[9] are used to estimate acreage disturbed. It is estimated that single family houses are built on 1/7 of an acre in heavily populated counties, and 1/5 of an acre in less populated counties.[10-12] It is also estimated that multiple living units such as apartments occupy 1/20 of an acre per living unit. For all of these residential construction activities, a project duration of 6 months is assumed.[10] Applying these factors to the reported number of new units in each county results in an estimate of acre-months of construction. This estimate of acre-months of construction combined with the construction emission factor is used to estimate residential construction particulate emissions.

For commercial, industrial, and institutional building construction, construction acreage is based on project valuations. Project valuations for additions and alterations are not included. According to the Construction Industry Research Board,[13] most additions and alterations would be modifications within the existing structure and normally would not include the use of large earthmoving equipment. Most horizontal additions would usually be issued a new building permit. The valuations are 3.7, 4.0 and 4.4 acres per million dollars of valuation for the respective construction types listed.[12] Valuations were corrected from 1999 values to 1977 values using the Annual Average Consumer Price Index (CPI-U-RS) provided by the U.S. Census Bureau.[14] The Census Bureau uses the Bureau of Labor Statistics' experimental Consumer Price Index (CPI-U-RS) for 1977 through 2000.[15] Valuations were corrected from 1999 values to 1977 values because the acres per dollar valuation values are based on 1977 valuations. For example, the CPI-U-RS for 1999 is 244.1 and the CPI-U-RS for 1977 is 100.0. The ratio of 1977 to 1999 dollars is 100.0/244.1 or 0.41. Inflation from 1999 to 2004 is estimated to be 12%. Thus, updating the 1977 valuation results to 2004 dollars produces a ratio of 1977 to 2004 dollars of 0.41/1.12 or 0.37. CARB assumes that each acre is under construction for 11 months for each project type.[10]

3.3.2 Assumptions and Limitations

1. The current methodology assumes that all construction operations in all parts of the state emit the same levels of PM10 on a per acre basis.
2. It is assumed that watering techniques are used statewide, reducing emissions by 50% and making it valid to apply the MRI emission factor without correction.
3. The methodology assumes that valuation is proportional to acreage disturbed, even for high-rise type building construction.
4. The methodology assumes that construction dust emissions are directly proportional to the number of acres disturbed during construction.
5. The estimates of acreage disturbed are limited in their accuracy. New housing units and project valuations do not provide direct estimates of actual acreage disturbed by construction operations in each county.
6. The methodology assumes that the Consumer Price Index (CPI-U-RS) provides an accurate estimate of 1977 and current values.

3.3.3 Temporal Activity

The temporal activity is assumed to occur five days a week between the hours of 8:00 AM and 4:00 PM. The table below shows the percentage of construction activity that is estimated to occur during each month. The monthly activity increases during the spring and summer months. Some districts may use a different profile that has a larger peak during the summer months.

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
6.4	6.4	8.3	9.2	9.2	9.2	9.2	9.2	9.2	8.3	8.3	7.3

3.4 Emission Estimation: Alternate Methodology for Road Construction

This section was adapted from Section 7.8 of CARB's Emission Inventory Methodology. Section 7.8 was last updated in August 1997.

The road construction dust source category provides estimates of the fugitive dust particulate matter due to construction activities while building roads. The emissions result from site preparation work that may include scraping, grading, loading, digging, compacting, light-duty vehicle travel, and other operations. Dust emissions from road construction operations are computed by using a PM10 emission factor developed by MRI.[3] The emission factor is based on observations of construction operations in California and Las Vegas. Activity data for road construction is expressed in terms of acre-months of construction. Acre-months are based on estimates of the acres disturbed for road construction. The acres disturbed are computed based on: estimates of the annual difference in road mileage; estimates of road width (to compute acres disturbed); and an assumption of 18 months as the typical project duration.

3.4.1 Emissions Estimation Methodology

Emission Factor. The PM10 emission factor used for estimating geologic dust emissions from road construction activities is based on work performed by MRI under contract to the PM10 Best Available Control Measure working group.[3] For most parts of the State, the emission factor used is 0.11 tons PM10/acre-month of activity. This emission factor is based on MRI's observation of the types, quantity, and duration of operations at eight construction sites (three in Las Vegas, and five in California). The bulk of the operations observed were site preparation related activities. The observed activity data were then combined with operation specific emission factors provided in U.S. EPA's AP-42 (5th Edition)[2] document to produce site emissions estimates. These site estimates were then combined to produce the overall average emission factor of 0.11 tons PM10/acre-month. The PM2.5/PM10 ratio for fugitive dust from construction and demolition activities is 0.1 based on the analysis conducted by MRI on behalf of WRAP.[7]

The construction emission factor is assumed to include the effects of routine dust suppression measures such as watering. A dust control effectiveness of 50% is assumed from these measures, which is based on the estimated control effectiveness of watering.[8] Therefore, if this emission factor is used for road construction activities where watering is not used, it should be doubled to more accurately reflect the actual emissions. The MRI document[3] lists their average emission factor values as uncontrolled. However, it can be argued that the activities do include the effects of controls. All of the test sites were actual operations that used watering controls, even if in some cases they were not used during the actual site visits. It is believed that the residual effects of controls are reflected in the MRI emission estimates.

The MRI report[3] also includes an emission factor for worst-case construction emissions of 0.42 tons of PM10/acre-month. This emission factor is appropriate for large scale construction operations that involve substantial earthmoving operations. The South Coast Air Quality Management District (SCAQMD) estimated that a percentage of their construction projects involve these types of operations, and applied the larger emission factor to these activities. For the remainder of the state, such detailed information is not readily available, so the average emission factor of 0.11 tons PM10 per acre-month is used by CARB.

Activity Data. For the purpose of estimating emissions, it is assumed that the fugitive dust emissions are related to the acreage affected by construction. Regionwide estimates of the acreage disturbed by roadway construction may not be directly available. Therefore, the miles of road built and the acreage disturbed per mile of construction can be used to estimate the overall acreage disturbed.

The miles of road built are based on the annual difference in the road mileage. These data, from the California Department of Finance[9] and Caltrans[16], are split for each county into freeways, state highways, and city and county road. The acreage of land disturbed

per mile of road construction is based on the number of lanes, lane width, and shoulder width for each listed road type. The assumptions used are provided in Table 3-4. Because most projects will probably also disturb land outside of the immediate roadway corridor, these acreage estimates are somewhat conservative.

The final parameter needed is project duration, which is assumed to be an average of 18 months.[10] Multiplying the road mileage built by the acres per mile and the months of construction provides the acre-months of activity for road building construction. This, multiplied by the emission factor, provides the emissions estimate.

Table 3-4. Roadway Acres per Mile of Construction Estimates

Road Type	Freeway	Highway	City & County
Number of Lanes	5	5	2
Width per Lane (feet)	12	12	12
Shoulder Width (feet)	10'x4 = 40'	20'x2 = 40'	20'x2 = 40'
Roadway Width* (feet)	100	76	64
Roadway Width* (miles)	0.019	0.014	0.012
Area per Mile** (acres)	12.1	9.2	7.8

*Roadway Width (miles) = [(Lanes x Width per Lane) + Shoulder Width] x (1 mile/5,280 feet)
**Area per Mile (acres) = Length x Width = 1 Mile x Width x 640 acres/mile^2

3.4.2 Temporal Activity

Temporal activity is assumed to occur five days a week between the hours of 8 AM and 4 PM. The table below shows the percentage of construction activity that is estimated to occur during each month. The monthly activity increases during the spring and summer months as shown below. Some districts use a slightly different profile that has a larger peak during the summer months.

ALL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
100	7.7	7.7	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	7.7

3.4.3 Assumptions and Limitations

1. The current methodology assumes that all construction operations in all parts of the state emit the same levels of PM10 on a per acre basis.
2. It is assumed that watering techniques are used statewide, reducing emissions by 50% and making it valid to apply the MRI emission factor without correction.
3. The methodology assumes that the acreage disturbed per mile for road building is similar statewide, and the overall disturbed acreage is approximately the same as the finished roadway's footprint.
4. The methodology assumes that construction dust emissions are directly proportional to the number of acres disturbed during construction.

3.5 Supplemental Emission Factors

AP-42 lists uncontrolled TSP emission factors for specific activities at construction sites.[2] These TSP emission factors as well as references to the relevant chapters of this handbook that provide PM10 and/or TSP emission factors for similar activities are presented in Table 3-5.

Table 3-5. TSP Emission Factors for Specific Construction Site Activities

Construction Phase	Activity	TSP Emission Factor*
Demolition and Debris Removal	Drilling soil	1.3 lb/hole
	Land clearing with bulldozer	$5.7\ (s)^{1.2} / M^{1.3}$ lb/hr
	Loading debris into trucks and subsequent unloading	See Chapter 4
	Truck transport of debris on paved or unpaved roads	See Chapters 5 and 6
Site Preparation (earth moving)	Bulldozing and compacting	$5.7\ (s)^{1.2} / M^{1.3}$ lb/hr
	Scrapers unloading topsoil	0.04 lb/ton
	Scrapers in travel mode	See Chapter 6
	Scrapers removing topsoil	20.2 lb/mile
	Grading	$0.040\ (S)^{2.5}$ lb/mile
	Loading excavated material into trucks and subsequent unloading	See Chapter 4
General Construction	Vehicular traffic	See Chapters 5 and 6
	Crushing and screening aggregate	See Chapter 11
	Material transfer	See Chapter 4

* Symbols for equations: M = material moisture content (%), s = material silt content (%), S = mean vehicle speed (mph).

3.6 Demonstrated Control Techniques

Because of the relatively short-term nature of construction activities, some control measures are more cost-effective than others. Frank Elswick of Midwest Industrial Supply Inc. presented an extensive summary of control measures for construction activities and their associated costs at a WRAP sponsored fugitive dust workshop in Palm Springs, CA in May 2005.[17] Elswick concluded that dust suppressant methods fall into the following six categories:

1. **Watering**
   * Watering works by agglomerating surface particles together.
   * No negative environmental impacts from using water.
   * Normally readily available.
   * Evaporates quickly, therefore typically only effective for short periods of time.
   * Frequency of application depends on temperature and humidity.
   * Generally labor intensive due to frequent application.
   * Costs associated with pre-watering and as needed watering are $55 to $80/hour.

2. **Chemical Stabilizers**

(a) Water absorbing products (e.g., calcium chloride brine or flakes, magnesium chloride brine, sodium chloride)

* These products work by significantly increasing surface tension of water between dust particles, helping to slow evaporation and further tighten compacted soil.
* Products ability to absorb water from the air is a function of temperature and humidity.
* These products work best in low humidity environments.
* Frequent re-application in dry climates.
* Must be watered to activate during dry months.
* Potential costly environmental impacts to fresh water aquatic life, plants and water quality
* Corrosive to metal and steel.
* Not suitable for non-traffic areas.
* Costs associated with traffic area program are $.03 - $.05 per square foot.

(b) Organic Petroleum Products (e.g. asphalt emulsions, cut/liquid asphalt, dust oils, petroleum resins)

* These products work by binding and/or agglomerating surface particles together because of asphalt adhesive properties.
* Potentially costly environmental due to presence of polycyclic aromatic hydrocarbons that are "hazardous air and water pollutants" that may be subject to reporting requirements.
* Can fragment under traffic conditions.
* Not suitable for non-traffic areas.
* Costs associated with traffic area program are $.05 - $.075 per square foot.

(c) Organic Non-Petroleum Products (e.g., ligninsulfonates, tall oil emulsions, vegetable oils)

* These products work by binding and/or agglomerating surface particles together.
* Surface binding for these product may be reduced or destroyed by rains.
* Generally limited availability of non-petroleum products.
* Ligninsulfonates can impact freshwater aquatic life due to high B.O.D. and C.O.D.
* Not suitable for non-traffic areas.
* Costs associated with traffic area program are $.04 - $.08 square foot.

(d) Polymer Products (e.g., polyvinyl acetates, vinyl acrylics)

* These products work by binding soil particles together because of the polymer's adhesive properties.
* Polymers also increase the load-bearing strength of all types of soils.
* Polymers are non-toxic, non-corrosive, and do not pollute ground water.
* Polymers dry virtually clear to create an aesthetically pleasing result.
* Polymers create a tough yet flexible crust to prevent wind and water erosion.
* Costs associated with traffic areas are $.05 - $.08 per square foot.
* Costs associated with disturbed non-traffic areas are $300 - $800 per acre depending on longevity desired.

* Costs associated with slopes and inactive stockpiles are $500 to $1,000 per acre.

(e) Synthetic Products (e.g., iso-alkane compounds)
* Synthetic fluids work as a dust suppressing ballasting mechanism, while also acting as a durable re-workable binder.
* Formulated with safe and environmentally friendly synthetic fluids; non-hazardous per OSHA, EPA and US DOT; contains no asphalt, oil or PAH's.
* Easy application; no water required.
* Costs associated with traffic area program are $.05 - $.10 per square foot.

3. **Sand Fences**
* Fabric on chain link fence.
* Redwood slat fence.
* Mylar sand fence.
* Most effective when used in conjunction with chemical stabilizers.

4. **Perimeter Sprinklers**
* Most effective when used in conjunction with other methods.

5. **Tire Cleaning Systems at Site Exit**
* Rumble strips to prevent track-out from site onto pavement.
* Washed rock 100' prior to exit onto pavement.

6. **On- Site Speed Control**
* Limiting on-site vehicle speed to 15mph.

Wet suppression and wind speed reduction are the two most common methods used to control open dust sources at construction sites because a source of water and material for wind barriers tend to be readily available on a construction site. However, several other forms of dust control are available. Table 3-6 displays each of the preferred control measures by dust source.[18, 19]

Table 3-6. Control Options for General Construction Sources of PM10

Emission source	Recommended control methods(s)
Debris handling	Wind speed reduction; wet suppression[a]
Truck transport[b]	Wet suppression; paving; chemical stabilization[c]
Bulldozers	Wet suppression[d]
Pan scrapers	Wet suppression of travel routes
Cut/fill material handling	Wind speed reduction; wet suppression
Cut/fill haulage	Wet suppression; paving; chemical stabilization
General construction	Wind speed reduction; wet suppression; early paving of permanent roads

[a] Dust control plans should contain precautions against watering programs that confound trackout problems.
[b] Loads could be covered to avoid loss of material in transport, especially if material is transported offsite.
[c] Chemical stabilization is usually cost-effective for relatively long-term or semipermanent unpaved roads.
[d] Excavated materials may already be moist and not require additional wetting. Furthermore, most soils are associated with an "optimum moisture" for compaction.

One of the dustiest construction operations is cutting and filling using scrapers, with the highest emissions occurring during scraper transit. In a 1999 MRI field study,[5] it was found that watering can provide a high level of PM10 control efficiency for scraper transit emissions. Average control efficiency remained above 75% approximately 2 hours after watering. The average PM10 efficiency decay rate for water was found to vary from approximately 3% to 14% hour. The decay rate depended upon relative humidity in a manner consistent with the effect of humidity on the rate of evaporation. Test results for watered scraper transit routes showed a steep increase in control efficiency with a doubling of surface moisture and little additional control efficiency at higher moisture levels. This is in keeping with past studies that found that control efficiency data can be successfully fitted by a bilinear function. In another recent MRI field study (MRI, 2001),[20] tests of mud and dirt trackout indicated that a 10% soil moisture content represents a reasonable first estimate of the point at which watering becomes counter productive. The control efficiencies afforded by graveling or paving of a 7.6 m (25 ft) access apron were in the range of 40% to 50%.

Table 3-7 summarizes tested control measures and reported control efficiencies for dust control measures applied to construction and demolition operation.

Table 3-7. Control Efficiencies for Control Measures for Construction/Demolition[20, 21]

Control measure	Source component	PM10 control efficiency	References/Comments
Apply water every 4 hrs within 100 feet of a structure being demolished	Active demolition and debris removal	36%	MRI, April 2001, test series 701. 4-hour watering interval (Scenario: lot remains vacant 6 mo after demolition)
Gravel apron, 25" long by road width	Trackout	46%	MRI, April 2001
Apply dust suppressants (e.g., polymer emulsion)	Post-demolition stabilization	84%	CARB April 2002; for actively disturbed areas
Apply water to disturbed soils after demolition is completed or at the end of each day of cleanup	Demolition Activities	10%	MRI, April 2001, test series 701. 14-hour watering interval.
Prohibit demolition activities when wind speeds exceed 25 mph	Demolition Activities	98%	Estimated for high wind days in absence of soil disturbance activities
Apply water at various intervals to disturbed areas within construction site	Construction Activities	61%	MRI, April 2001, test series 701. 3.2-hour watering interval
		74%	MRI, April 2001, test series 701. 2.1-hour watering interval
Require minimum soil moisture of 12% for earthmoving	Scraper loading and unloading	69%	AP-42 emission factor equation for materials handling due to increasing soil moisture from 1.4% to 12%
Limit on-site vehicle speeds to 15 mph (Scenario: radar enforcement)	Construction traffic	57%	Assume linear relationship between PM10 emissions and uncontrolled vehicle speed of 35 mph

3.7 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. Regulatory formats specify the threshold source size that triggers the need for control application. Example regulatory formats downloaded from the Internet for several local air quality agencies in the WRAP region are presented in Table 3-8. The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: www.maricopa.gov/envsvc/air/ruledsc.asp

3.8 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations (e.g., whether an unpaved road has been paved, graveled, or treated; whether haul truck beds are covered ; whether water trucks are being used during construction activities). An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Table 3-9 summarizes the compliance tools that are applicable to construction and demolition.

Table 3-8. Example Regulatory Formats for Construction and Demolition

Source	Control measure	Goal	Threshold	Agency
Paved Roads-Public and Private Track-out and Carryout	Install track-out ctrl device	Prevent/remove track-out from haul trucks and tires	Paved roads within construction sites, where haul trucks traverse; with disturbed surface area >2 acres, with 100 cubic yards of bulk material hauled	Maricopa County Rule 310 04/07/2004
	Either immediately cleanup track-out (>50ft) and nightly clean-up of rest; install grizzly/wheel wash system; install gravel pad--30ftx50ft, 6" deep; pave intersection--100ftx20ft; route traffic over track-out ctrl devices; limit access to unprotected routes; pave construction roadways ASAP	Control track-out on paved construction roads	Immediate track-out clean-up after 50ft, at end of workday for less; gravel pad standards are min, paved intersection also min and must be accessible to public; limit access to unprotected routes with barriers	Maricopa County Rule 310 04/07/2004
	Track-out control device must be installed at all access points to public roads and there must be mud/dirt removal from interior paved roads with sufficient frequency	Allow mud/dirt to drop off before leaving site and prevent track-out	For sites greater than 5 acres or those with more than 100 yd3 of daily import/export	SJVAPCD Rule 8041 11/15/2001
	Removal of track-out within one hour or selecting a track-out prevention option and removing track-out at the end of the day		For sites greater than 5 acres or those with more than 100 yd3 of daily import/export and track-out is less than 50ft	SCAQMD Rule 403 12/11/1998
	Removing track-out ASAP		Track-out greater than 50 ft	SCAQMD Rule 403 12/11/1998
	Require road surface paved or chemically stabilized from point of intersection with a public paved road to distance of at least 100 ft by 20 ft or installation of track-out control device from point of intersection with a public paved road to a distance of at least 25 ft by 20 ft	Prohibits material from extending more than 25 ft from a site entrance	For sites greater than 5 acres or those with more than 100 yd3 of daily import/export	SCAQMD Rule 403 12/11/1998
Bulk Materials Transport	Establishes speed limits. Requires at least 6" freeboard when crossing paved public road, water applied to top of load. Haul trucks need tarp or suitable cover and truck interior must be cleaned before leaving site	Limit visible dust emissions to 20% opacity and prevent spillage from holes	Trucks entering paved public roads (6" freeboard); leaving work site; specific haul trucks need covering	SJVAPCD Rule 8031 11/15/2001
	Requires covering haul trucks or to use bottom-dumping if possible and maintain minimum 6" freeboard (in high winds)			SCAQMD Rule 403 12/11/1998
	Freeboard at least 3"; prevent spillage from holes; install track-out ctrl devices	Prevent/remove track-out onto paved roads	Within the work site; removes possible track-out from tires, exterior of trucks that traverse work site	Maricopa County Rule 310 04/07/2004
Construction and Demolition Earthmoving	Require water and chemical stabilizers (dust suppressants) be applied, in conjunction with optional wind barrier	Limit visible dust emissions to 20% opacity		SJVAPCD Rule 8021 11/15/2001
	Specifies Dust Control Plan must be submitted	Limit visible dust emissions to 20% opacity	For areas 40 acres or larger where earth movement of 2500 yd3 or more on at least 3 days is intended	SJVAPCD Rule 8021 11/15/2001

Table 3-8. Example Regulatory Formats for Construction and Demolition (Continued)

Source	Control measure	Goal	Threshold	Agency
	Requires implementation of Best Available Control Measures (BACM)	Prohibit visible dust emissions beyond property line and limit an upwind/downwind PM10 differential to 50 ug/m3. Limit visible dust emissions to 100 ft from origin		SCAQMD Rule 403 12/11/1998
Construction and Demolition Demolition	Application of dust suppressants	Limit visible dust emissions to 20% opacity		SJVAPCD Rule 8021 11/15/2001
	Application of best available control measures (BACM)	Prohibits visible dust emissions beyond property line. Limits downwind PM10 levels to 50 ug/m3	For projects greater than 5 acres or 100 yd3 of daily import/export	SCAQMD Rule 403 12/11/1998
Construction and Demolition Grading Operations	Requires pre-watering and phasing of work	Limit VDE to 20% opacity		SJVAPCD Rule 8021 11/15/2001
	Requires water application and chemical stabilizers	Increase moisture content to proposed cut	For graded areas where construction will not begin for more than 60 days after grading	SCAQMD Rule 403 12/11/1998
	Preapplication of water to depth of proposed cuts and reapplication of water as necessary. Also stabilization of soils once earth-moving is complete	Ensure visible emissions do not extend more than 100 ft from sources		SCAQMD Rule 403 12/11/1998

Table 3-9. Compliance Tools for Construction and Demolition

Record keeping	Site inspection/monitoring
Site map; description of work practices; duration of project activities; locations and methods for demolition activities; locations and amounts of all earthmoving and material (types) handling operations; dust suppression equipment (types) and maintenance; frequencies, amounts, times, and rates of watering or dust suppressant application; mud/dirt carryout prevention and remediation requirements; wind shelters; meteorological log.	Observation of earthmoving and demolition activities, considering timeframe of project; observation of operation of dust suppression systems, vehicle/ equipment operation and disturbance areas; surface material sampling and analysis for silt and moisture contents; observation of truck spillage onto adjacent paved roads; mud/dirt carryout prevention and remediation; inspection of wind sheltering; real-time portable monitoring of PM; observation of dust plume opacity exceeding a standard.

3.9 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for construction and demolition. A sample cost-effectiveness calculation is presented below for a specific control measure (gravel apron at trackout egress points) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous control measure for construction and demolition, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Construction and Demolition (Mud/Dirt Egress Points)

Step 1. Determine source activity and control application parameters.

Egress traffic rate (veh/day)	100
Number of egress points	2
Duration of construction activity (month)	24
Wet days/year	10
Number of workdays/year	260
Number of emission days/yr (workdays without rain)	250
Control Measure	Gravel apron 25 ft long by road width
Economic Life of Control System (yr)	2
Control Efficiency	46%
Reference	MRI, 2001[20]

The number of vehicles per day, wet days per year, workdays per year, and the economic life of the control are determined from climatic and industrial records. The number of emission days per year are calculated by subtracting the number of annual wet days from the number of annual workdays as follows:

Number of workdays/year – Wet days/year = 260 – 10 = 250

Gravel aprons at the two construction site egress points have been chosen as the applied control measure. The control efficiency was obtained from MRI, 2001.[19]

Step 2. Obtain PM10 Emission Factor. The PM10 emission factor for construction and demolition dust is 6 g/vehicle.[22]

Step 3. Calculate Uncontrolled PM Emissions. The PM10 emission factor, EF, (given in Step 2) is multiplied by the number of vehicles per day and by the number of emission days per year (both under activity data) and divided by 454 grams/lb and 2000 lb/ton to compute the annual PM10 emissions, as follows:

Annual PM10 emissions = (EF x Veh/day x Emission days/year)/(454 x 2,000)
Annual PM10 emissions = (6 x 100 x 250) / (454 x 2,000) = 0.165 tons/year

Annual PM2.5 emissions = 0.1 x PM10 emissions[7]
Annual PM2.5 emissions = (0.1 x 0.165 tons/year) = 0.0165 tons/year

Step 4. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) are equal to the uncontrolled emissions (calculated above in Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency).

For this example, we have selected gravel aprons at egress points as our control measure. Based on a control efficiency estimate of 46% for a gravel apron, the annual PM emissions are calculated to be:

Annual Controlled PM10 emissions = (0.165 tons/yr) x (1 – 0.46) = 0.089 tons/yr
Annual Controlled PM2.5 emissions = (0.0165 tons/yr) x (1 – 0.46) = 0.0089 tons/yr

Step 5. Determine Annual Cost to Control PM Emissions.

Capital costs ($)	500
Annual Operating/Maintenance costs ($)	3,150
Annual Interest Rate	5%
Capital Recovery Factor	0.54
Annualized Cost ($/year)	3,419

The capital costs, annual operating and maintenance costs, and annual interest rate (AIR) are assumed values for illustrative purposes. The Capital Recovery Factor (CRF) is calculated as follows:

Capital Recovery Factor = AIR x $(1+AIR)^{\text{Economic life}} / (1+AIR)^{\text{Economic life}} - 1$
Capital Recovery Factor = 5% x $(1+ 5\%)^2 / (1+ 5\%)^2 - 1 = 0.54$

The Annualized Cost is calculated by adding the product of the Capital Recovery Factor and the Capital costs to the annual Operating and Maintenance costs:

Annualized Cost = (CRF x Capital costs) + Annual Operating and Maintenance costs
Annualized Cost = (0.54 x $500) + $3,150 = $3,419

Step 6. Calculate Cost Effectiveness. Cost effectiveness is calculated by dividing the annualized cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions:

Cost effectiveness = Annualized Cost / (Uncontrolled emissions – Controlled emissions)

Cost effectiveness for PM10 emissions = $3,420 / (0.165 - 0.089) = $44,991/ton
Cost effectiveness for PM2.5 emissions = $3,420 / (0.0165 - 0.0089) = $449,908/ton

3.10 References

1. Midwest Research Institute, 1999. *Estimating Particulate Matter Emissions From Construction Operations*, Kansas City, Missouri, September.

2. U.S. EPA, 1995. *Compilation of Air Pollutant Emission Factors.* AP-42. Fifth Edition, Research Triangle Park, NC, September.

3. Muleski, G., 1996. *Improvement of Specific Emission Factors (BACM Project No. 1), Final Report.* Midwest Research Institute, March.

4. Cowherd, C. Jr., Axtell, K. Jr., Maxwell, C.M., Jutze, G.A., 1974. *Development of Emission Factors for Fugitive Dust Sources*, EPA Publication No. EPA-450/3-74-037, NTIS Publication No. PB-238 262.

5. Muleski, G. E., Cowherd, C., 1999. *Emission Measurements of Particle Mass and Size Emission Profiles From Construction Activities,* EPA-600/R-99-091 (NTIS PB2000-101-11), U.S. Environmental Protection Agency, Research Triangle Park, NC.

6. Anderson, C.L., Brady, M.J. 1998. *General Conformity Analysis for Major Construction Projects: An Example Analysis of Fugitive PM10 Emissions.* Paper 98-MP4B.06 presented at the Annual Meeting of the Air & Waste Management Association, June 1998.

7. MRI, 2006. Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Emission Factors, prepared for the WRAP by Midwest Research Institute, Project No. 110397, February 1.

8. PEDCo Environmental Specialists, 1973. *Investigation of Fugitive Dust Sources – Emissions and Control*, prepared for the Environmental Protection Agency, OAQPS, contract No. 68-02-0044, May.

9. California Department of Finance, California Statistical Abstract - 2000, Section I, Construction, Economic Research Unit, (916) 322-2263. (www.dof.ca.gov)

10. Midwest Research Institute, 1974. *Inventory of Agricultural Tilling, Unpaved Roads and Airstrips and Construction Sites*, prepared for the U.S. Environmental Protection Agency, PB 238-929, Contract 68-02-1437, November.

11. South Coast Air Quality Management District, 1977. *Emissions from Construction/Demolition*, Emission Programs Unit, December.

12. Taback, J.J., et al, 1980. *Inventory of Emissions from Non-Automotive Vehicular Sources*, Final Report, KVB.

13. Personal Communication between CARB and Ben Bartolotto, Research Director of the Construction Industry Research Board, (818) 841-8210 (August 2002).

14. U.S. Census Bureau, Income 2000, Supplemental Information: Annual Average Consumer Price Index (CPI-U-RS); (www.census.gov/hhes/income/income00.cpiur).

15. U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Indexes, CPI Research Series Using Current Labor Methods (CPI-U-RS), (www.bls.gov/cpi/cpirsdc).

16. California Department of Transportation, Highway System Engineering Branch.

17. Elswick, F., 2005. *Emission Control Methods for the Construction Industry,* WRAP Fugitive Dust Control Workshop, Palm Springs, CA, May 10-11.

18. MRI, 1993. *Background Documentation For AP-42 Section 11.2.4, Heavy Construction Operations*, EPA Contract No. 69-D0-0123, Midwest Research Institute, Kansas City, MO, April.

19. C. Cowherd, et al., 1988. *Control Of Open Fugitive Dust Sources*, EPA-450/3-88-008, U.S. Environmental Protection Agency, Research Triangle Park, NC, September.

20. Muleski, G. E., Cowherd, C., 2001. *Particulate Emissions From Controlled Construction Activities,* EPA-600/R-01-031 (NTIS PB2001-107255), U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, April.

21. CARB April 2002. *Evaluation of Air Quality Performance Claims for Soil-Sement Dust Suppressant.*

22. Muleski, G.E., Page, A., Cowherd, C. Jr., 2003. *Characterization of Particulate Emissions from Controlled Construction Activities: Mud/Dirt Carryout*, EPA-600/R-03-007. Research Triangle Park, NC: U.S. Environmental Protection Agency, February.

Chapter 4. Materials Handling

4.1 Characterization of Source Emissions 4-1
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4.1 Characterization of Source Emissions

Inherent in operations that use minerals in aggregate form is the handling and transfer of materials from one process to another (e.g., to and from storage). Outdoor storage piles are usually left uncovered, partially because of the need for frequent material transfer into or out of storage. Dust emissions occur at several points in the storage cycle, such as material loading onto the pile, disturbances by strong wind currents, and loadout from the pile. The movement of trucks and loading equipment in the storage pile area is also a substantial source of dust. Dust emissions also occur at transfer points between conveyors or in association with vehicles used to haul aggregate materials

4.2 Emissions Estimation: Primary Methodology[1-14]

This section was adapted from Section 13.2.4 of EPA's *Compilation of Air Pollutant Emission Factors (AP-42)*. Section 13.2.4 was last updated in January 1995.

The quantity of dust emissions from aggregate storage operations varies with the volume of aggregate passing through the storage cycle. Emissions also depend on the age of the pile, moisture content, and proportion of aggregate fines. When freshly processed aggregate is loaded onto a storage pile, the potential for dust emissions is at a maximum. Fines are easily disaggregated and released to the atmosphere upon exposure to air currents, either from aggregate transfer itself or from high winds. However, as the aggregate pile weathers the potential for dust emissions is greatly reduced. Moisture causes aggregation and cementation of fines to the surfaces of larger particles. Any significant rainfall soaks the interior of the pile, and then the drying process is very slow.

Table 4-1 summarizes measured moisture and silt content values for industrial aggregate materials. Silt (particles equal to or less than 75 micrometers [μm] in diameter) content is determined by measuring the portion of dry aggregate material that passes through a 200-mesh screen, using ASTM-C-136 method.[1]

Total dust emissions from aggregate storage piles result from several distinct source activities within the storage cycle:

1. Loading of aggregate onto storage piles (batch or continuous drop operations).
2. Equipment traffic in storage area.
3. Wind erosion of pile surfaces and ground areas around storage piles (see Chapter 9).
4. Loadout of aggregate for shipment or for return to the process stream (batch or continuous drop operations).

Either adding aggregate material to a storage pile or removing it usually involves dropping the material onto a receiving surface. Truck dumping on the pile or loading out from the pile to a truck with a front-end loader are examples of batch drop operations. Adding material to the pile by a conveyor stacker is an example of a continuous drop operation.

Table 4-1. Typical Silt and Moisture Contents of Materials at Various Industries[a]

Industry	No. of facilities	Material	Silt content (%)			Moisture content (%)		
			No. of samples	Range	Mean	No. of samples	Range	Mean
Iron and steel production	9	Pellet ore	13	1.3-13	4.3	11	0.64-4.0	2.2
		Lump ore	9	2.8-19	9.5	6	1.6-8.0	5.4
		Coal	12	2.0-7.7	4.6	11	2.8-11	4.8
		Slag	3	3.0-7.3	5.3	3	0.25-2.0	0.92
		Flue dust	3	2.7-23	13	1	–	7
		Coke breeze	2	4.4-5.4	4.9	2	6.4-9.2	7.8
		Blended ore	1	–	15	1	–	6.6
		Sinter	1	–	0.7	0	–	–
		Limestone	3	0.4-2.3	1.0	2	ND	0.2
Stone quarrying and processing	2	Crusted limestone	2	1.3-1.9	1.6	2	0.3-1.1	0.7
		Various limestone products	8	0.8-14	3.9	8	0.46-5.0	2.1
Taconite mining and processing	1	Pellets	9	2.2-5.4	3.4	7	0.05-2.0	0.9
		Tailings	2	ND	11	1	–	0.4
Western surface coal mining	4	Coal	15	3.4-16	6.2	7	2.8-20	6.9
		Overburden	15	3.8-15	7.5	0	–	–
		Exposed ground	3	5.1-21	15	3	0.8-6.4	3.4
Coal-fired power plant	1	Coal (as received)	60	0.6-4.8	2.2	59	2.7-7.4	4.5
Municipal solid waste landfills	4	Sand	1	–	2.6	1	–	7.4
		Slag	2	3.0-4.7	3.8	2	2.3-4.9	3.6
		Cover	5	5.0-16	9.0	5	8.9-16	12
		Clay/dirt mix	1	–	9.2	1	–	14
		Clay	2	4.5-7.4	6.0	2	8.9-11	10
		Fly ash	4	78-81	80	4	26-29	27
		Misc. fill materials	1	–	12	1	–	11

[a] References 1-10. ND = no data.

The quantity of particulate emissions generated by either type of drop operation, expressed as a function of the amount of material transferred, may be estimated using the following empirical expression:[11]

Metric Units

$$E = k(0.0016)\ \frac{\left(\frac{U}{2.2}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}\ \text{(kg/megagram [Mg])} \qquad (1)$$

English Units

$$E = k(0.0032)\ \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}\ \text{(pound [lb]/ton)}$$

where:

E = emission factor
k = particle size multiplier (dimensionless)
U = mean wind speed (meters per second, m/s, or miles per hour, mph)
M = material moisture content (%)

The particle size multiplier in the equation, k, varies with aerodynamic particle size range. For PM10, k is 0.35.[11] There are two sources of fugitive dust associated with materials handling activities, namely particulate emissions from aggregate handling and storage piles, which typically consists of loader and truck traffic around the storage piles, and fugitive dust associated with the transfer of aggregate by buckets or conveyors. The PM2.5/PM10 ratios for these two sources of fugitive dust are 0.1 and 0.15, respectively.[12] In general, particulate emissions from loader and truck traffic around the storage piles predominates over particulate emissions from transfer of aggregate by buckets or conveyors. Equation 1 retains the assigned quality rating of A if applied within the ranges of source conditions that were tested in developing the equation; see table below. Note that silt content is included, even though silt content does not appear as a correction parameter in the equation. While it is reasonable to expect that silt content and emission factors are interrelated, no significant correlation between the two was found during the derivation of the equation, probably because most tests with high silt contents were conducted under lower winds, and vice versa. It is recommended that estimates from Equation 1 be reduced one quality rating level if the silt content used in a particular application falls outside the following range:

Ranges of Source Conditions for Equation 1			
Silt content (%)	Moisture content (%)	Wind speed	
		m/s	mph
0.44 - 19	0.25 - 4.8	0.6 - 6.7	1.3 - 15

For Equation 1 to retain the quality rating of A when applied to a specific facility, reliable correction parameters must be determined for the specific sources of interest. The field and laboratory procedures for aggregate sampling are given in Reference 3. In the event that site-specific values for correction parameters cannot be obtained, the

appropriate mean values from Table 4-1 may be used, but the quality rating of the equation is reduced by one letter.

For emissions from trucks, front-end loaders, dozers, and other vehicles traveling between or on piles, it is recommended that the equations for vehicle traffic on unpaved surfaces be used (see Chapter 6). For vehicle travel between storage piles, the silt value(s) for the areas among the piles (which may differ from the silt values for the stored materials) should be used.

Worst-case emissions from storage pile areas occur under dry, windy conditions. Worst-case emissions from materials-handling operations may be calculated by substituting into the equation appropriate values for aggregate material moisture content and for anticipated wind speeds during the worst-case averaging period, usually 24 hours. A separate set of nonclimatic correction parameters and source extent values corresponding to higher than normal storage pile activity also may be justified for the worst-case averaging period.

4.3 Demonstrated Control Techniques

Watering and the use of chemical wetting agents are the principal means for control of emissions from materials handling operations involving transfer of bulk minerals in aggregate form. The handling operations associated with the transfer of materials to and from open storage piles (including the traffic around piles) represent a particular challenge for emission control. Dust control can be achieved by: (a) source extent reduction (e.g., mass transfer reduction), (b) source improvement related to work practices and transfer equipment such as load-in and load-out operations (e.g., drop height reduction, wind sheltering, moisture retention)), and (c) surface treatment (e.g., wet suppression).

In most cases, good work practices that confine freshly exposed material provide substantial opportunities for emission reduction without the need for investment in a control application program. For example, loading and unloading can be confined to leeward (downwind) side of the pile. This statement also applies to areas around the pile as well as the pile itself. In particular, spillage of material caused by pile load-out and maintenance equipment can add a large source component associated with traffic-entrained dust. Emission inventory calculations show, in fact, that the traffic dust component may easily dominate over emissions from transfer of material and wind erosion. The prevention of spillage and subsequent spreading of material by vehicles traversing the area is essential to cost-effective emission control. If spillage cannot be prevented because of the need for intense use of mobile equipment in the storage pile area, then regular cleanup should be employed as a necessary mitigative measure.

Fugitive emissions from aggregate materials handling systems are frequently controlled by wet suppression systems. These systems use liquid sprays or foam to suppress the formation of airborne dust. The primary control mechanisms are those that prevent emissions through agglomerate formation by combining small dust particles with larger aggregate or with liquid droplets. The key factors that affect the degree of agglomeration and, hence, the performance of the system are the coverage of the material

by the liquid and the ability of the liquid to "wet" small particles. There are two types of wet suppression systems—liquid sprays which use water or water/surfactant mixtures as the wetting agent and systems that supply foams as the wetting agent.

Liquid spray wet suppression systems can be used to control dust emissions from materials handling at conveyor transfer points. The wetting agent can be water or a combination of water and a chemical surfactant. This surfactant, or surface-active agent, reduces the surface tension of the water. As a result, the quantity of liquid needed to achieve good control is reduced.

Watering is also useful to reduce emissions from vehicle traffic in the storage pile area. Continuous chemical treating of material loaded onto piles, coupled with watering or treatment of roadways, can reduce total particulate emissions from aggregate storage operations by up to 90%.[13, 14]

Table 4-2 presents a summary of control measures and reported control efficiencies for materials handling that includes the application of a continuous water spray at a conveyor transfer point and two control measures for storage piles.

Table 4-2. Control Efficiencies for Control Measures for Materials Handling

Control measure	PM10 control efficiency	References/comments
Continuous water spray at conveyor transfer point	62%	The control efficiency achieved by increasing the moisture content of the material from 1% to 2% is calculated utilizing the AP-42 emission factor equation for materials handling which contains a correction term for moisture content.
Require construction of 3-sided enclosures with 50% porosity for storage pile	75%	Sierra Research, 2003.[15] Determined through modeling of open area windblown emissions with 50% reduction in wind speed and assuming no emission reduction when winds approach open side.
Water the storage pile by hand or apply cover when wind events are declared	90%	Fitz et al., April 2000.[16]

4.4 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. Regulatory formats specify the threshold source size that triggers the need for control application. Example regulatory formats for several local air quality agencies in the WRAP region are presented in Table 4-3. The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: http://www.maricopa.gov/envsvc/air/ruledesc.asp

Table 4-3. Example Regulatory Formats for Materials Handling

Control Measure	Goal	Threshold	Agency
Establishes wind barrier and watering or stabilization requirements and bulk materials must be stored according to stabilization definition and outdoor materials covered	Limit visible dust emissions to 20% opacity		SJVAPCD Rule 8031 11/15/2001
Best available control measures: wind sheltering, watering, chemical stabilizers, altering load-in/load-out procedures, or coverings	Prohibits visible dust emissions beyond property line and limits upwind/downwind PM10 differential to 50 µg/m3		SCAQMD Rule 403 12/11/1998
Watering, dust suppressant (when loading, stacking, etc.); cover with tarp, watering (when not loading, etc.); wind barriers, silos, enclosures, etc.	Limit VDE to 20% opacity; stabilize soil	For storage piles with >5% silt content, 3ft high, >/=150 sq ft; work practices for stacking, loading, unloading, and when inactive; soil moisture content min 12%; or at least 70% min for optimum soil moisture content; 3 sided enclosures, at least equal to pile in length, same for ht, porosity </=50%	Maricopa County Rule 310 04/07/2004
Watering, clean debris from paved roads and other surface after demolition	Stabilize demolition debris and surrounding area; establish crust and prevent wind erosion	Immediately water and clean-up after demolition	Maricopa County Rule 310 04/07/2004
Utilization of dust suppressants other than water when necessary; prewater; empty loader bucket slowly	Prevent wind erosion from piles; stabilize condition where equip and vehicles op	Bulk material handling for stacking, loading, and unloading; for haul trucks and areas where equipment op	Maricopa County Rule 310 04/07/2004

4.5 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations. An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Table 4-4 summarizes the compliance tools that are applicable to materials handling.

Table 4-4. Compliance Tools for Materials Handling

Record keeping	Site inspection/monitoring
Site map; work practices and locations; material throughputs; type of material and size characterization; typical moisture content when fresh; vehicle/equipment disturbance areas; material transfer points and drop heights; spillage and cleanup occurrences; wind fence/enclosure installation and maintenance; dust suppression equipment and maintenance records; frequencies, amounts, times, and rates for watering and dust suppressants; meteorological log.	Observation of material transfer operations and storage areas (including spills), operation of wet suppression systems, vehicle/ equipment operation and disturbance areas; surface material sampling and analysis for silt and moisture contents; inspection of wind sheltering including enclosures; real-time portable monitoring of PM; observation of dust plume opacities exceeding a standard.

4.6 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for materials handling. A sample cost-effectiveness calculation is presented

below for a specific control measure (continuous water spray at conveyor transfer point) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous control measure for materials handling, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Materials Handling (Conveyor Transfer Point)

Step 1. Determine source activity and control application parameters.

Material throughput (tons/hr)	25
Operating cycle (hours/day)	12
Number of workdays/year	312
Number of transfer points	1
Moisture content of material, M (%)	1
Mean wind speed, U (mph)	6
Control Measure	Water spray located at conveyor transfer point
Control application/frequency	Continuous
Economic Life of Control System (yr)	10

The material throughput, operating cycle, number of workdays per year, number of transfer points, material moisture content, wind speed, and economic life of the control system are assumed values for illustrative purposes. A continuous water spray located at a conveyor transfer point has been chosen as the applied control measure to increase the moisture content of the material from 1% to 2%.

Step 2. Calculate Uncontrolled PM10 Emission Factor. The PM10 emission factor, EF, is calculated from the AP-42 equation utilizing the appropriate correction parameters (mean wind speed U = 6 mph and moisture content M = 1%), as follows:

$$EF=(0.35) \times (0.0032) \times (6/5)^{1.3} / (1/2)^{1.4} = 0.00377 \text{ lb/ton}$$

Step 3. Calculate Uncontrolled PM Emissions. The PM10 emission factor (calculated in Step 2) is multiplied by the material throughput, operating cycle, and workdays per year (all under activity data) and then divided by 2,000 lbs to compute the annual PM10 emissions in tons per year, as follows:

Annual PM10 emissions = (EF x Material Throughput x Operating Cycle x Workdays/yr) / 2,000
Annual PM10 emissions = (0.00377 x 25 x 12 x 312) / 2000 = 0.175 tons

Annual PM2.5 emissions = 0.15 x PM10 emissions[12]
Annual PM2.5 emissions = (0.15 x 0.175 tons) = 0.0263 tons

Step 4. Calculate Controlled PM Emission Factor. The PM emission factor for controlled emissions, EF, is calculated from the AP-42 equation utilizing the appropriate correction parameters (mean wind speed U = 6 mph and moisture content M = 2%), as follows:

$$EF=(0.35) \times (0.0032) \times (6/5)^{1.3} / (2/2)^{1.4} = 0.00142 \text{ lb/ton}$$

Step 5. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) is calculated by multiplying the PM10 emission factor (calculated in Step 4) by the material throughput, operating cycle, and workdays per year (all under activity data) and then divided by 2,000 lbs to compute the annual emissions in tons per year, as follows:

Annual emissions = (EF x Material Throughput x Operating Cycle x Workdays/yr) / 2,000
Annual PM10 Emissions = (0.00142 x 25 x 12 x 312) / 2000 = 0.0664 tons

Annual PM2.5 emissions for material transfer = 0.15 x PM10 emissions[12]
Annual PM2.5 Emissions = (0.15 x 0.0665 tons) = 0.00100 tons

Note: The control efficiency of using a water spray to increase the material moisture content from 1% to 2% is 62% (100 x (0.175 – 0.0664) / 0.175)

Step 6. Determine Annual Cost to Control PM Emissions.

Capital costs ($)	16,000
Annual Operating/Maintenance costs ($)	12,200
Annual Interest Rate	3%
Capital Recovery Factor	0.1172
Annualized Cost ($/yr)	14,076

The capital costs, annual operating and maintenance costs, and annual interest rate (AIR) are assumed values for illustrative purposes. The Capital Recovery Factor (CRF) is calculated from the Annual Interest Rate (AIR) and the Economic Life of the control system, as follows:

$$\text{Capital Recovery Factor} = AIR \times (1+AIR)^{\text{Economic life}} / (1+AIR)^{\text{Economic life}} - 1$$

$$\text{Capital Recovery Factory} = 3\% \times (1+ 3\%)^{10} / (1+ 3\%)^{10} - 1 = 0.1172$$

The Annualized Cost is calculated by adding the product of the Capital Recovery Factor by the Capital costs with the annual Operating/Maintenance costs as follows:

Annualized Cost = (CRF x Capital costs) + Operating/Maintenance costs
Annualized Cost = (0.1172 x 16,000) + 12,200 = $14,076

Step 7. Calculate Cost-effectiveness. Cost-effectiveness is calculated by dividing the annualized cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions:

Cost-effectiveness = Annualized Cost/ (Uncontrolled emissions – Controlled emissions)

Cost-effectiveness for PM10 emissions = $14,076/ (0.175– 0.0664) = $129,267/ton
Cost-effectiveness for PM2.5 emissions = $14,076/ (0.0263– 0.0100) = $861,779/ton

4.7 References

1. Cowherd, C., Jr., *et al.*, 1974. *Development of Emission Factors for Fugitive Dust Sources*, EPA-450/3-74-037, U. S. EPA, Research Triangle Park, NC, June.

2. Bohn, R., *et al.*, 1978. *Fugitive Emissions from Integrated Iron And Steel Plants*, EPA-600/2-78-050, U. S. EPA Cincinnati, OH, March.

3. Cowherd, C., Jr., *et al.*,1979. *Iron and Steel Plant Open Dust Source Fugitive Emission Evaluation*, EPA-600/2-79-103, U. S. EPA, Cincinnati, OH, May.

4. MRI, 1979. *Evaluation of Open Dust Sources in the Vicinity Of Buffalo, New York*, EPA Contract No. 68-02-2545, Midwest Research Institute, Kansas City, MO, March.

5. Cowherd, C., Jr., and Cuscino, T. Jr.,1977. *Fugitive Emissions Evaluation*, MRI-4343-L, Midwest Research Institute, Kansas City, MO, February.

6. Cuscino, T. Jr., *et al.*, 1979. *Taconite Mining Fugitive Emissions Study*, Minnesota Pollution Control Agency, Roseville, MN, June.

7. PEDCO, 1981. *Improved Emission Factors for Fugitive Dust from Western Surface Coal Mining Sources,* 2 Volumes, EPA Contract No. 68-03-2924, PEDCO Environmental, Kansas City, MO, July.

8. TRC, 1984. *Determination of Fugitive Coal Dust Emissions from Rotary Railcar Dumping,* TRC, Hartford, CT, May.

9. MRI, 1987. *PM10 Emission Inventory of Landfills in the Lake Calumet Area*, EPA Contract No. 68-02-3891, Midwest Research Institute, Kansas City, MO, September.

10. MRI, 1988. *Chicago Area Particulate Matter Emission Inventory - Sampling and Analysis*, EPA Contract No. 68-02-4395, Midwest Research Institute, Kansas City, MO, May.

11. MRI, 1987. *Update of Fugitive Dust Emission Factors in AP-42 Section 11.2*, EPA Contract No. 68-02-3891, Midwest Research Institute, Kansas City, MO, July.

12. MRI, 2006. Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Emission Factors, prepared for the WRAP by Midwest Research Institute, Project No. 110397, February 1.

13. Jutze, G.A. *et al.* 1974. *Investigation of Fugitive Dust Sources Emissions and Control*, EPA-450/3-74-036a, U. S. EPA, Research Triangle Park, NC, June.

14. Cowherd, C. Jr., *et al.*,1988. *Control Of Open Fugitive Dust Sources*, EPA-450/3-88-008, U. S. EPA, Research Triangle Park, NC, September.

15. Sierra Research, 2003. *Final BACM Technological and Economic Feasibility Analysis,* report prepared for the San Joaquin Valley Unified Air Pollution Control District. March 21.

16. Fitz, D., K. Bumiller, 2000. *Evaluation of Watering to Control Dust in High Winds,* J.AWMA, April.

Chapter 5. Paved Roads

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5.1 Characterization of Source Emissions

Particulate emissions occur whenever vehicles travel over a paved surface such as a road or parking lot. Particulate emissions from paved surfaces are due to direct emissions from vehicles in the form of exhaust, brake wear and tire wear emissions, and resuspension of loose material on the road surface. In general terms, resuspended particulate emissions from paved surfaces originate from, and result in the depletion of the loose material present on the surface (i.e., the surface loading). In turn, that surface loading is continuously replenished by other sources. At industrial sites, surface loading is replenished by spillage of material and trackout from unpaved roads and staging areas.

Various field studies have found that public streets and highways as well as roadways at industrial facilities can be major sources of the atmospheric particulate matter within an area.[1-9] Of particular interest in many parts of the United States are the increased levels of emissions from public paved roads when the equilibrium between deposition and removal processes is upset. This situation can occur for various reasons, including application of granular materials for snow and ice control, mud/dirt carryout from construction activities in the area, and deposition from wind and/or water erosion of surrounding unstabilized areas. In the absence of continuous addition of fresh material (through localized trackout or application of antiskid material), paved road surface loading should reach an equilibrium value in which the amount of material resuspended matches the amount replenished. The equilibrium surface loading value depends upon numerous factors. It is believed that the most important factors are: the mean speed of vehicles traveling the road, the average daily traffic (ADT), the number of lanes and ADT per lane, the fraction of heavy vehicles (buses and trucks), and the presence or absence of curbs, storm sewers and parking lanes.[10]

5.2 Emissions Estimation: Primary Methodology[1-29]

This section was adapted from Section 13.2.1 of EPA's *Compilation of Air Pollutant Emission Factors (AP-42)*. Section 13.2.1 was last updated in December 2003.

Dust emissions from paved roads have been found to vary with what is termed the "silt loading" present on the road surface as well as the average weight of vehicles traveling the road. The term silt loading (sL) refers to the mass of silt-size material (equal to or less than 75 micrometers [µm] in physical diameter) per unit area of the travel surface. The total road surface dust loading consists of loose material that can be collected by broom sweeping and vacuuming of the traveled portion of the paved road. The silt fraction is determined by measuring the proportion of the loose dry surface dust that passes through a 200-mesh screen using the ASTM-C-136 method. Silt loading is the product of the silt fraction and the total loading, and is abbreviated "sL." Additional details on the sampling and analysis of such material are provided in Appendices C.1 and C.2 of AP-42.

The surface silt loading (sL) provides a reasonable means of characterizing seasonal variability in a paved road emission inventory. In many areas of the country, road surface silt loadings are heaviest during the late winter and early spring months when the residual loading from snow/ice controls is greatest.[11-21] As noted earlier, once replenishment of fresh material is eliminated, the road surface silt loading can be expected to reach an equilibrium value, which is substantially lower than the late winter/early spring values.

The quantity of particulate emissions from resuspension of loose material on the road surface due to vehicle travel on a dry paved road may be estimated using the following empirical expression:

$$E = k\left(\frac{sL}{2}\right)^{0.65} \times \left(\frac{W}{3}\right)^{1.5} - C \qquad (1)$$

where,

E = particulate emission factor (having units matching the units of k),
k = particle size multiplier for particle size range,
sL = road surface silt loading (grams per square meter, g/m^2),
W = average weight (tons) of the vehicles traveling the road, and
C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear.[27]

It is important to note that Equation 1 calls for the average weight of all vehicles traveling the road. For example, if 99% of traffic on the road are 2-ton cars/trucks while the remaining 1% consists of 20-ton trucks, then the mean weight "W" is 2.2 tons. More specifically, Equation 1 is not intended to be used to calculate a separate emission factor for each vehicle weight class. Instead, only one emission factor should be calculated to represent the "fleet" average weight of all vehicles traveling the road. The particle size multiplier (k) varies with aerodynamic size range. For PM10, k equals 0.016 lb/VMT (i.e., 7.3 g/VMT or 4.6 g/VKT). The PM2.5/PM10 ratio for fugitive dust from travel on paved roads is 0.15.[28]

The PM2.5 and PM10 emission factors for the exhaust, brake wear and tire wear of a 1980's vehicle fleet (C) were obtained from EPA's MOBILE6.2 model.[29] The emission factor also varies with aerodynamic size range as shown in Table 5-1. Equation 1 is based on a regression analysis of numerous emission tests, including 65 tests for PM10.[10] Sources tested include public paved roads, as well as controlled and uncontrolled industrial paved roads. All sources tested were of freely flowing vehicles traveling at constant speed on relatively level roads. No tests of "stop-and-go" traffic or vehicles under load were available for inclusion in the database. The equation retains the quality rating of A, if applied within the range of source conditions that were tested in developing the equation, as follows:

Silt loading:	0.03 - 400 g/m^2; 0.04 - 570 grains/square foot
Mean vehicle weight:	1.8 - 38 megagrams; 2.0 - 42 tons
Mean vehicle speed:	16 - 88 kilometers per hour; 10 - 55 miles per hour

Table 5-1. Emission Factors for 1980's Vehicle Fleet Exhaust, Brake Wear, and Tire Wear

	C, Emission factor for exhaust, brake wear, and tire wear[a]		
Particle size	g/VMT	g/VKT	lb/VMT
PM2.5	0.1617	0.1005	0.00036
PM10	0.2119	0.1317	0.00047

[a] Units shown are grams per vehicle mile traveled (g/VMT), grams per vehicle kilometer traveled (g/VKT), and pounds per vehicle mile traveled (lb/VMT).

NOTE: There may be situations where low silt loading and/or low average weight will yield calculated negative emissions from Equation 1. If this occurs, the emissions calculated from Equation 1 should be set to zero.

Users are cautioned that application of Equation 1 outside of the range of variables and operating conditions specified above (e.g., application to roadways or road networks with speeds below 10 mph and with stop-and-go traffic) will result in emission estimates with a higher level of uncertainty. To retain the quality rating of A for PM10 for the emission factor equation when it is applied to a specific paved road, it is necessary that reliable correction parameter values for the specific road in question be determined. With the exception of limited access roadways, which are difficult to sample, the collection and use of site-specific silt loading (sL) data for public paved road emission inventories are strongly recommended. The field and laboratory procedures for determining surface material silt content and surface dust loading are summarized in Appendices C.1 and C.2 of AP-42. In the event that site-specific silt loading values cannot be obtained, an appropriate value for a paved public road may be selected from the default values given in Table 5-2, but the quality rating of the equation should be reduced by two levels. Also, recall that Equation 1 refers to emissions due to freely flowing (not stop-and-go) traffic at constant speed on level roads.

Equation 1 may be extrapolated to average uncontrolled conditions (but including natural mitigation) under the simplifying assumption that annual (or other long-term) average emissions are inversely proportional to the frequency of measurable (at least 0.254 mm [0.01 inch]) precipitation by application of a precipitation correction term. The precipitation correction term can be applied on a daily or an hourly basis.[26]

For the daily basis, Equation 1 becomes:

$$E_{ext} = \left[k \left(\frac{sL}{2} \right)^{0.65} \left(\frac{W}{3} \right)^{1.5} - C \right] \left(1 - \frac{P}{4N} \right) \qquad (2)$$

where k, sL, W, *and* C are as defined in Equation 1 and

E_{ext} = annual or other long-term average emission factor in the same units as k,
P = number of "wet" days with at least 0.254 mm (0.01 in) of precipitation during the averaging period, and
N = number of days in the averaging period (e.g., 365 for annual, 91 for seasonal, 30 for monthly)

Note that the assumption leading to Equation 2 is based by analogy with the approach used to develop long-term average unpaved road emission factors in Chapter 6. However, Equation 2 above incorporates an additional factor of "4" in the denominator to account for the fact that paved roads dry more quickly than unpaved roads and that the precipitation may not occur over the complete 24-hour day.

Table 5-2. Ubiquitous Silt Loading Default Values with Hot Spot Contributions from Anti-Skid Abrasives for Public Paved Roads (g/m^2)

Average Daily Traffic (ADT) Category	< 500	500-5,000	5,000-10,000	> 10,000
Ubiquitous baseline (g/m^2)	0.6	0.2	0.06	0.03 0.015 limited access
Ubiquitous winter baseline multiplier during months with frozen precipitation	X4	X3	X2	X1
Initial peak additive contribution from application of antiskid abrasive (g/m^2)	2	2	2	2
Days to return to baseline conditions (assume linear decay)	7	3	1	0.5

For the hourly basis, Equation 1 becomes:

$$E_{ext} = \left[k \left(\frac{sL}{2} \right)^{0.65} \left(\frac{W}{3} \right)^{1.5} - C \right] \left(1 - \frac{1.2P}{N} \right) \quad (3)$$

where k, sL, and W, and C are as defined in Equation 1 and

E_{ext} = annual or other long-term average emission factor in the same units as k,
P = number of hours with at least 0.254 mm (0.01 in) of precipitation during the averaging period, and
N = number of hours in the averaging period (e.g., 8,760 for annual; 2,124 for season; 720 for monthly).

Note that the assumption leading to Equation 3 is based by analogy with the approach used to develop long-term average unpaved road emission factors in Chapter 6. Also note that in the hourly moisture correction term (1-1.2P/N) for Equation 3, the 1.2 multiplier is applied to account for the residual mitigative effect of moisture. For most applications, this equation will produce satisfactory results. However, if the time interval for which the equation is applied is short (e.g., 1 hour or 1 day), the application of this multiplier makes it possible for the moisture correction term to become negative. This will result in calculated negative emissions which is not realistic. Users should expand the time interval to include sufficient "dry" hours such that negative emissions are not calculated. For the special case where this equation is used to calculate emissions on an hour by hour basis, such as would be done in some emissions modeling situations, the moisture correction term should be modified so that the moisture correction "credit" is applied to the first hours following cessation of precipitation. In this special case, it is

suggested that this 20% "credit" be applied on a basis of one hour credit for each hour of precipitation up to a maximum of 12 hours.

Maps showing the geographical distribution of "wet" days on an annual basis for the United States based on meteorological records on a monthly basis are available in the *Climatic Atlas of the United States*.[23] Alternative sources include other Department of Commerce publications such as local climatological data summaries. The National Climatic Data Center (NCDC) offers several products that provide hourly precipitation data. In particular, NCDC offers a *Solar and Meteorological Surface Observation Network 1961-1990* (SAMSON) CD-ROM, which contains 30 years worth of hourly meteorological data for first-order National Weather Service locations. Whatever meteorological data are used, the source of that data and the averaging period should be clearly specified. It is emphasized that the simple assumption underlying Equations 2 and 3 has not been verified in any rigorous manner. For that reason, the quality ratings for Equations 2 and 3 should be downgraded one letter from the rating that would be applied to Equation 1.

Table 5-2 presents recommended default silt loadings for normal baseline conditions and for wintertime baseline conditions for public paved roads in areas that experience frozen precipitation with periodic application of antiskid material.[24] The winter baseline is represented as a multiple of the nonwinter baseline, depending on the average daily vehicle traffic count (ADT) value for the road in question. As shown, a multiplier of 4 is applied for low volume roads (< 500 ADT) to obtain a wintertime baseline silt loading of $4 \times 0.6 = 2.4$ g/m^2.

It is suggested that an additional (but temporary) silt loading contribution of 2 g/m^2 occurs with each application of antiskid abrasive for snow/ice control. This was determined based on a typical application rate of 500 lb per lane mile and an initial silt content of 1%. Ordinary rock salt and other chemical deicers add little to the silt loading because most of the chemical dissolves during the snow/ice melting process.

To adjust the baseline silt loadings for mud/dirt trackout, the number of trackout points is required. It is recommended that in calculating PM10 emissions, six additional miles of road be added for each active trackout point from an active construction site, to the paved road mileage of the specified category within the county. In calculating PM2.5 emissions, it is recommended that three additional miles of road be added for each trackout point from an active construction site. It is suggested the number of trackout points for activities other than road and building construction areas be related to land use. For example, in rural farming areas, each mile of paved road would have a specified number of trackout points at intersections with unpaved roads. This value could be estimated from the unpaved road density (miles per square mile).

The use of a default value from Table 5-2 should be expected to yield only an order-of-magnitude estimate of the emission factor. Public paved road silt loadings are dependent upon: traffic characteristics (speed, ADT, and fraction of heavy vehicles); road characteristics (curbs, number of lanes, parking lanes); local land use (agriculture, new residential construction) and regional/seasonal factors (snow/ice controls, wind blown

dust). As a result, the collection and use of site-specific silt loading data is highly recommended. In the event that default silt loading values are used, the quality ratings for the equation should be downgraded two levels.

Limited access roadways (high speed freeways) pose severe logistical difficulties in terms of surface sampling, and few silt loading data are available for such roads. Nevertheless, the available data do not suggest great variation in silt loading for limited access roadways from one part of the country to another. For annual conditions, a default value of 0.015 g/m^2 is recommended for limited access roadways.[9, 22] Even fewer of the available data correspond to worst-case situations, and elevated loadings are observed to be quickly depleted because of high traffic speeds and high ADT rates. A default value of 0.2 g/m^2 is recommended for short periods of time following application of snow/ice controls to limited access roads.[22]

The limited data on silt loading values for industrial roads have shown as much variability as public roads. Because of the variations of traffic conditions and the use of preventive mitigative controls, the data probably do not reflect the full extent of the potential variation in silt loading on industrial roads. However, the collection of site specific silt loading data from industrial roads is easier and safer than for public roads. Therefore, the collection and use of site-specific silt loading data is preferred and is highly recommended. In the event that site-specific values cannot be obtained, an appropriate value for an industrial road may be selected from the mean values given in Table 5-3, but the quality rating of the equation should be reduced by two levels.

AP-42 measurements of silt loading for paved roads involve periodic sampling from representative roads that are then used to calculate emissions. These silt loadings have been shown to be highly variable in time and space, and the labor required for their acquisition mitigates against frequent sampling that covers a wide spatial extent. Several groups – Desert Research Institute (DRI) and UC Riverside (CE-CERT) - have developed vehicle-based mobile sampling systems for PM10 emissions of re-entrained paved road dust over the past several years.[30] Both systems (DRI's system is called TRAKER and CE-CERT's system is called SCAMPER) have been calibrated in Las Vegas against actual AP-42 silt loadings determined for samples taken in the study area for a complete range of paved roadway classifications and a large range of visible paved road surface loadings. The study results showed a reasonable relationship between the continuous vehicle-based PM10 emission measurements and actual silt loadings.

Table 5-3 Typical Silt Content and Loading Values for Paved Roads at Industrial Facilities[a] (Metric And English Units).

Industry	No. of sites	No. of samples	Silt content (%)		No. of travel lanes	Total loading x 10^{-3}			Silt loading (g/m^2)	
			Range	Mean		Range	Mean	Units[b]	Range	Mean
Copper smelting	1	3	15.4-21.7	19.0	2	12.9-19.5 45.8-69.2	15.9 55.4	kg/km lb/mi	188-400	292
Iron and steel production	9	48	1.1-35.7	12.5	2	0.006-4.77 0.020-16.9	0.495 1.75	kg/km lb/mi	0.09-79	9.7
Asphalt batching	1	3	2.6-4.6	3.3	1	12.1-18.0 43.0-64.0	14.9 52.8	kg/km lb/mi	76-193	120
Concrete batching	1	3	5.2-6.0	5.5	2	1.4-1.8 5.0-6.4	1.7 5.9	kg/km lb/mi	11-12	12
Sand and gravel processing	1	3	6.4-7.9	7.1	1	2.8-5.5 9.9-19.4	3.8 13.3	kg/km lb/mi	53-95	70
Municipal solid waste landfill	2	7	—	—	2	—	—	—	1.1-32.0	7.4
Quarry	1	6	—	—	2	—	—		2.4-14	8.2

[a] References 1-2, 5-6, 11-13; dashes indicate information not available.
[b] Multiply entries by 1,000 to obtain stated units: kilograms per kilometer (kg/km) and pounds per mile (lb/mi).

5.3 Emission Estimation: Alternate Methodology

This section was adapted from Section 7.9 of CARB's Emission Inventory Methodology. Section 7.9 was last updated in July 1997.

The paved road dust category includes emissions of fugitive dust particulate matter entrained by vehicular travel on paved roads. The California Air Resources Board (CARB) estimates road dust emissions for the following four classes of roads: (1) freeways/expressways, (2) major streets/highways, (3) collector streets, and (4) local streets. Dust emissions from vehicle travel on paved roads are computed using the emission factor equation provided in AP-42 (see Section 5.2 of this document). Inputs to the paved road dust equation were developed from area-specific roadway silt loading and average vehicle weight data measured by Midwest Research Institute (MRI, 1996).[31]

Data from states and air districts are used to estimate county specific VMT (vehicle miles traveled) data.[32, 33] State highway[34] data are used to estimate the fraction of travel on each of the four road types in each county.

The statewide average vehicle weight for California is assumed to be 2.4 tons. This estimate is based on an informal traffic count estimated by MRI while they were performing California silt loading measurements.[31] CARB assumes the following silt loadings for the four road categories: 0.02 g/m^2 for freeways, 0.035 g/m^2 for major roads, and 0.32 g/m^2 for collector and local roads.[35]

Temporal activity is assumed to be the same as on-road vehicle travel: uniform in spring and fall, increasing slightly in summer, and decreasing slightly in winter. The monthly temporal profile shown below in Table 5-4 shows this trend. The weekly and daily activities are estimated to have higher activities on weekdays and during daylight hours.

Table 5-4. Monthly Temporal Profile for On-road Vehicle Travel

ALL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
100	7.7	7.7	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	7.7

This alternative methodology utilized by CARB is subject to the following assumptions and limitations:

1. The current AP-42 emission factor assumes that road dust emissions are proportional to VMT, roadway silt loading, and average vehicle weight.
2. It may be necessary to assume that virtually the same silt loading values apply throughout the state because of lack of measured silt loadings.
3. The methodology assumes that roadway silt loading, and therefore the emission factor, varies by the type of road.
4. It is assumed that the EPA particle size multiplier (i.e., the 'k' factor in the AP-42 equation) reasonably represents the size distribution of paved road dust.

5. The average vehicle fleet weight is assumed to be 2.4 tons in California (except for the SCAQMD that assumes 3 tons).
6. For freeway and major roads, emissions growth is assumed to be proportional to changes in roadway centerline mileage. For collector and local roads, emissions growth is assumed proportional to changes in VMT.

5.4 Demonstrated Control Techniques

Because of the importance of road surface silt loading, control techniques for paved roads attempt either to prevent material from being deposited onto the surface (preventive controls) or to remove from the travel lanes any material that has been deposited (mitigative controls). Covering of loads in trucks and the paving of access areas to unpaved lots or construction sites are examples of preventive measures. Examples of mitigative controls include vacuum sweeping, water flushing, and broom sweeping and flushing. Actual control efficiencies for any of these techniques can be highly variable. Locally measured silt loadings before and after the application of controls is the preferred method to evaluate controls. It is particularly important to note that street sweeping of gutters and curb areas may actually increase the silt loading on the traveled portion of the road. Redistribution of loose material onto the travel lanes will actually produce a short-term increase in the emissions.

In general, preventive controls are usually more cost effective than mitigative controls. The cost-effectiveness of mitigative controls falls off dramatically as the size of an area to be treated increases. The cost-effectiveness of mitigative measures is also unfavorable if only a short period of time is required for the road to return to equilibrium silt loading condition. That is to say, the number and length of public roads within most areas of interest preclude any widespread and routine use of mitigative controls. On the other hand, because of the more limited scope of roads at an industrial site, mitigative measures may be used quite successfully (especially in situations where truck spillage occurs). Note, however, that public agencies could make effective use of mitigative controls to remove sand/salt from roads after the winter ends.

Because available controls will affect the silt loading, controlled emission factors may be obtained by substituting controlled silt loading values into the appropriate equation. (Note that emission factors from controlled industrial roads were used in the development of the equation.) The collection of surface loading samples from treated, as well as baseline (untreated) roads provides a means to track effectiveness of the controls over time.

Table 5-5 summarizes tested control measures and reported control efficiencies for measures that reduce the generation of fugitive dust from paved roads.

Table 5-5. Control Efficiencies for Control Measures for Paved Roads[36-38]

Control measure	Source component	PM10 control efficiency	References/Comments
Implement street sweeping program with non-efficient vacuum units (14-day frequency)	Local streets	7%	MRI, September 1992. For non-PM10 efficient sweepers based on 55% efficient sweeping, 5.5 day equilibrium return time and CA-VMT weighted sweeping frequency (7 to 30 days)
	Arterial/collector streets	11%	
Implement street sweeping program with PM10 efficient vacuum units (14-day frequency)	Local streets	16%	MRI, September 1992. For PM10 efficient sweepers, based on 86% efficient sweeping, 8.6 day return time, and CA-VMT weighted sweeping frequency (7 to 30 days)
	Arterial/collector streets	26%	
Require streets to be swept by non-efficient vacuum units (once per month frequency)	Local, arterial and collector streets	4%	MRI, September 1992. For non-PM10 efficient sweepers based on 55% efficient sweeping, 5.5 day equilibrium return time and CA-VMT weighted sweeping frequency (7 to 30 days)
Require streets to be swept by PM10 efficient vacuum units (once per month frequency)	Local, arterial and collector streets	9%	MRI, September 1992. For PM10 efficient sweepers, based on 86% efficient sweeping, 8.6 day return time, and CA-VMT weighted sweeping frequency (7 to 30 days)
Require wind- or water-borne deposition to be cleaned up within 24 hours after discovery	All Streets	100%	Assumes total cleanup of spill on roadway before traffic resumes
Install pipe-grid trackout-control device	Mud/dirt carryout	80%	Sierra Research, 2003.
Install gravel bed trackout apron (3 in deep, 25 ft long and full road width)	Mud/dirt carryout	46%	MRI, April 2001
Require paved interior roads to be 100 foot long and full road width, or add 4 foot shoulder for paved roads	Mud/dirt carryout	42%	MRI, April 2001

5.5 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. Example regulatory formats for several local air quality agencies in the WRAP region are presented in Table 5-6. The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: www.maricopa.gov/envsvc/air/ruledesc.asp

Table 5-6. Example Regulatory Formats for Paved Roads

Control Measure	Goal	Threshold	Agency
Limit speed limit to 15 mph or less	Limit track-out from bulk material transport; reduce particulate matter emissions from paved roads	Work site roads, crossing paved roads transporting bulk materials; during disking and blading ops	Maricopa County Rule 310 04/07/2004
Requires paved travel section, and 4 ft of paved or stabilized shoulder on each side of travel section. Shoulders shall be paved with dust palliative or gravel (2"). Medians shall be constructed as follows: with curbing, solid paving; apply dust palliatives, or with material that prevent track-0ut such as landscaping or decorative rock.	Comply with stabilization standard: limit shoulder visible dust emissions to 20% opacity; limit silt loading to 0.33 oz/ft2	Newly constructed or modified paved roads	Clark County Hydrographic Basins 212, 216, 217 Sect. 93 Air Quality Reg. 07/01/04
Requires paved shoulders. As an option to paving or vegetation requirements, oils or chemical dust suppressants can be used and must be maintained	Limit visible dust emissions to 20% opacity	Roads with average daily vehicle trips (ADVT) of 500 or more	SJVAPCD Rule 8061 11/15/2001
Require average shoulder width to be 4 ft. Curbing adjacent to and contiguous with a paved lane or shoulder can be used in lieu of shoulder width requirements. Intersections, auxiliary entry and exit lanes may be constructed adjacent to and contiguous with a paved roadway in lieu of shoulder requirements	Limit visible dust emissions to 20% opacity	Roads with average daily vehicle trips (ADVT) 500-3000	SJVAPCD Rule 8061 11/15/2001
Require average shoulder width to be 8 ft. Curbing adjacent to and contiguous with a paved lane or shoulder can be used in lieu of shoulder width requirements. Intersections, auxiliary entry and exit lanes may be constructed adjacent to and contiguous with a paved roadway in lieu of shoulder requirements	Limit visible dust emissions to 20% opacity	Roads with average daily vehicle trips (ADVT) greater than 3000	SJVAPCD Rule 8061 11/15/2001
Medians constructed with minimum 4 ft shoulder widths adjacent to traffic lanes, and landscaped. Medians constructed with curbing id speed limit < 45 mph	Meet stabilized surface requirements and limit visible dust emissions to 20% opacity	Roads with average daily vehicle trips (ADVT) of 500 or more and medians part of roadway	SJVAPCD Rule 8061 11/15/2001
Curbing and shoulder width requirements in event of contingency notification	Maintain stabilized surface; limit paved road dust	Roads with average daily vehicle trips (ADVT) of 500 or more	SCAQMD Rule 1186 9/10/1999
Require average shoulder width to be 4 ft.	Limit visible dust emissions to 20% opacity	Roads with average daily vehicle trips (ADVT) 500-3000	SCAQMD Rule 1186 9/10/1999
Require average shoulder width to be 8 ft.	Limit visible dust emissions to 20% opacity	Roads with average daily vehicle trips (ADVT) > 3000	SCAQMD Rule 1186 9/10/1999
For speed limit >45 mph: pave median area with typical roadway materials. For speed limit <45 mph: medians must be landscaped or treated with chemical stabilizers.	Maintain stabilized surface	Roads with average daily vehicle trips (ADVT) of 500 or more	SCAQMD Rule 1186 9/10/1999

5.6 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations. An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Table 5-7 summarizes the compliance tools that are applicable to paved roads.

Table 5-7. Compliance Tools for Paved Roads

Record keeping	Site inspection/monitoring
Road map; traffic volumes, speeds, and patterns; vacuum sweeping, mud/dirt trackout precautions, spill cleanup, erosion control, tarping of haul trucks; curbing of roads; application of sand/salt for anti-skid operations; dust suppression equipment and maintenance records.	Sampling of silt loading on paved road surfaces; counting of traffic volumes; observations of vacuum sweeping, high dust emission areas (including track-on and wash-on points), road curbing/shoulders; observation of dust plume opacity (visible emissions) exceeding a standard; real-time portable monitoring of PM.

5.7 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for fugitive dust originating from paved roads. A sample cost-effectiveness calculation is presented below for a specific control measure (PM10 efficient street sweeper) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous control

measure for paved roads, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Paved Roads
(Arterial Road Through Industrial Area)

Step 1. Determine source activity and control application parameters.

Vehicles/day	200
Average vehicle speed (mph)	40
Length of road (miles)	10
Control Measure	Use of PM10 efficient street sweepers
Control application/frequency	Once per month
Economic Life of Control System (yr)	10
Control Efficiency	9.2%

The number of vehicles per day, the average vehicle speed, road length, and economic life are assumed values for illustrative purposes. Street sweeping, using PM10 efficient sweepers has been chosen as the applied control measure. The control application/frequency and control efficiency are default values provided by MRI.[37]

Step 2. Calculate PM10 Emission Factor. The PM10 emission factor is calculated from the AP-42 equation.

$$E\ (lb/VMT) = 0.016\ (sL/2)^{0.65}\ (W/3)^{1.5} - C) \times (1-(P/1460))$$

sL—silt loading (g/m^2)	12
W—average vehicle weight (tons)	5
C—exhaust plus break and tire wear (lb/VMT)	0.00047
P—wet days/yr (number/yr)	50

E = 0.106 lb/VMT

Step 3. Calculate Uncontrolled PM Emissions. The PM10 emission factor (calculated in Step 2) is multiplied by the number of vehicles per day and the road length (both under activity data) and then multiplied by 365/2,000 to compute the annual PM10 emissions, as follows:

Annual PM10 emissions = (Emission Factor x Vehicles/day x Road length x 365 / 2,000
Annual PM10 emissions = (0.106 x 200 x 10) x 365 /2,000 = 39 tons

Annual PM2.5 emissions = 0.15 x PM10 emissions[28]
Annual PM2.5 emissions = (0.15 x 39) = 5.8 tons

Step 4. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) are equal to the uncontrolled emissions (calculated above in Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency).

For this example, a PM10 efficient street sweeper with a control efficiency of 9.2% has been selected as the control measure. Thus, the annual controlled PM10 and PM2.5 emissions estimates are calculated to be:

Annual Controlled PM10 emissions = (39 tons) x (1 – 0.092) = 35 tons
Annual Controlled PM2.5 emissions = (5.8 tons) x (1 – 0.092) = 5.3 tons

Step 5. Determine Annual Cost to Control PM Emissions.

Capital costs ($)	152,000
Annual Operating/Maintenance costs ($)	16,000
Annual Interest Rate	3%
Capital Recovery Factor	0.1172
Annualized Cost ($/yr)	33,819

The capital costs, annual operating and maintenance costs, and annual interest rate (AIR) are assumed values for illustrative purposes. The Capital Recovery Factor (CRF) is calculated from the Annual Interest Rate (AIR) and the Economic Life of the control system, as follows:

$$\text{Capital Recovery Factor} = AIR \times (1+AIR)^{\text{Economic life}} / (1+AIR)^{\text{Economic life}} - 1$$

$$\text{Capital Recovery Factory} = 3\% \times (1+3\%)^{10} / (1+3\%)^{10} - 1 = 0.1172$$

The Annualized Cost is calculated by adding the product of the Capital Recovery Factor and the Capital costs to the annual Operating/Maintenance costs:

Annualized Cost = (CRF x Capital costs) + Annual Operating/Maintenance costs

Annualized Cost = (0.1172 x 152,000) + 16,000 = $33,819

Step 6. Calculate Cost Effectiveness. Cost effectiveness is calculated by dividing the annualized cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions:

Cost effectiveness = Annualized Cost/ (Uncontrolled emissions – Controlled emissions)

Cost effectiveness for PM10 emissions = $33,819 / (39 - 35) = $9,492/ton
Cost effectiveness for PM2.5 emissions = $33,819 / (5.8 - 5.3) = $63,283/ton

5.8 References

1. Dunbar, D.R., 1976. *Resuspension of Particulate Matter*, EPA-450/2-76-031, U. S. EPA, Research Triangle Park, NC, March.

2. Bohn, R. *et al.*, 1978. *Fugitive Emissions from Integrated Iron and Steel Plants*, EPA-600/2-78-050, U. S. EPA, Cincinnati, OH, March.

3. Cowherd, C. Jr., *et al.*,1979. *Iron and Steel Plant Open Dust Source Fugitive Emission Evaluation*, EPA-600/2-79-103, U. S. Environmental Protection Agency, Cincinnati, OH, May.

4. Cowherd, C. Jr., *et al.*, 1977. *Quantification of Dust Entrainment from Paved Roadways*, EPA-450/3-77-027, U. S. EPA, Research Triangle Park, NC, July.

5. MRI, 1983. *Size Specific Particulate Emission Factors for Uncontrolled Industrial and Rural Roads*, EPA Contract No. 68-02-3158, Midwest Research Institute, Kansas City, MO, September.

6. Cuscino, T. Jr., *et al.*, 1983. *Iron and Steel Plant Open Source Fugitive Emission Control Evaluation*, EPA-600/2-83-110, U. S. EPA, Cincinnati, OH, October.

7. Reider, J.P., 1983. *Size-specific Particulate Emission Factors for Uncontrolled Industrial and Rural Roads*, EPA Contract 68-02-3158, Midwest Research Institute, Kansas City, MO, September.

8. Cowherd, C. Jr., Englehart, P.J., 1984. *Paved Road Particulate Emissions*, EPA-600/7-84-077, U. S. Environmental Protection Agency, Cincinnati, OH, July.

9. Cowherd, C. Jr., Englehart, P.J., 1985. *Size Specific Particulate Emission Factors for Industrial and Rural Roads*, EPA-600/7-85-038, U. S. EPA, Cincinnati, OH, September.

10. MRI, 1993. *Emission Factor Documentation for AP-42, Sections 11.2.5 and 11.2.6 - Paved Roads*, EPA Contract No. 68-D0-0123, Midwest Research Institute, Kansas City, MO, March.

11. MRI, 1979. *Evaluation of Open Dust Sources in the Vicinity of Buffalo, New York*, EPA Contract No. 68-02-2545, Midwest Research Institute, Kansas City, MO, March.

12. MRI, 1987. *PM10 Emission Inventory of Landfills in the Lake Calumet Area*, EPA Contract No. 68-02-3891, Midwest Research Institute, Kansas City, MO, September.

13. MRI, 1988. *Chicago Area Particulate Matter Emission Inventory - Sampling and Analysis*, Contract No. 68-02-4395, Midwest Research Institute, Kansas City, MO, May.

14. MDHES, 1992. *Montana Street Sampling Data*, Montana Department Of Health and Environmental Sciences, Helena, MT, July.

15. PEI, 1989. *Street Sanding Emissions and Control Study*, PEI Associates, Inc., Cincinnati, OH, October.

16. Harding Lawson, 1991. *Evaluation of PM10 Emission Factors for Paved Streets*, Harding Lawson Associates, Denver, CO, October.

17. RTP, 1990. *Street Sanding Emissions and Control Study*, RTP Environmental Associates, Inc., Denver, CO, July.

18. AeroVironment, 1992. *Post-storm Measurement Results - Salt Lake County Road Dust Silt Loading Winter 1991/92 Measurement Program*, AeroVironment, Inc., Monrovia, CA, June.

Chapter 6. Unpaved Roads

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6.1 Characterization of Source Emissions

When a vehicle travels on an unpaved surface such as an unpaved road or unpaved parking lot, the force of the wheels on the road surface causes pulverization of surface material. Particles are lifted and dropped from the rolling wheels, and the road surface is exposed to strong air currents in turbulent shear with the surface. The turbulent wake behind the vehicle continues to act on the road surface after the vehicle has passed. The quantity of dust emissions from a given segment of unpaved road varies linearly with the volume of traffic. Field investigations also have shown that emissions depend on source parameters that characterize the condition of a particular road and the associated vehicle traffic. Characterization of these source parameters allow for "correction" of emission estimates to specific road and traffic conditions present on public and industrial roadways.

6.2 Emission Estimation: Primary Methodology[1-26]

This section was adapted from Section 13.2.2 of EPA's *Compilation of Air Pollutant Emission Factors (AP-42)*. Section 13.2.2 was last updated in December 2003.

Dust emissions from unpaved roads have been found to vary directly with the fraction of silt (particles smaller than 75 micrometers [µm] in physical diameter) in the road surface materials.[1] The silt fraction is determined by measuring the proportion of loose dry surface dust that passes a 200-mesh screen using the ASTM-C-136 method. A summary of this method is contained in Appendix C of AP-42. Table 6-1 summarizes measured silt values for industrial unpaved roads. Table 6-2 summarizes measured silt values for public unpaved roads. It should be noted that the ranges of silt content for public unpaved roads vary over two orders of magnitude. Therefore, the use of data from this table can potentially introduce considerable error. Use of this data is strongly discouraged when it is feasible to obtain locally gathered data.

Since the silt content of a rural dirt road will vary with geographic location, it should be measured for use in projecting emissions. As a conservative approximation, the silt content of the parent soil in the area can be used. Tests, however, show that road silt content is normally lower than in the surrounding parent soil, because the fines are continually removed by the vehicle traffic, leaving a higher percentage of coarse particles. Other variables are important in addition to the silt content of the road surface material. For example, at industrial sites, where haul trucks and other heavy equipment are common, emissions are highly correlated with vehicle weight. On the other hand, there is far less variability in the weights of cars and pickup trucks that commonly travel publicly accessible unpaved roads throughout the United States. For those roads, the moisture content of the road surface material may be more dominant in determining differences in emission levels between a hot desert environment and a cool moist location.

Table 6-1. Typical Silt Content Values of Surface Material on Industrial Unpaved Roads[a]

Industry	Road use or surface material	Plant sites	No. of samples	Silt content (%)	
				Range	Mean
Copper smelting	Plant road	1	3	16-19	17
Iron and steel production	Plant road	19	135	0.2-19	6.0
Sand and gravel processing	Plant road	1	3	4.1-6.0	4.8
	Material storage area	1	1	–	7.1
Stone quarry and processing	Plant road	2	10	2.4-16	10
	Haul road to/from pit	4	20	5.0-15	8.3
Taconite mining and processing	Service road	1	8	2.4-7.1	4.3
	Haul road to/from pit	1	12	3.9-9.7	5.8
Western surface coal mining	Haul road to/from pit	3	21	2.8-18	8.4
	Plant road	2	2	4.9-5.3	5.1
	Scraper route	3	10	7.2-25	17
	Haul road (freshly graded)	2	5	18-29	24
Construction sites	Scraper routes	7	20	0.56-23	8.5
Lumber sawmills	Log yards	2	2	4.8-12	8.4
Municipal solid waste landfills	Disposal routes	4	20	2.2-21	6.4

[a] References 1, 5-15.

Table 6-2. Typical Silt Content Values of Surface Material on Public Unpaved Roads[a]

Industry	Road use or surface material	Plant sites	No. of samples	Silt content (%)	
				Range	Mean
Publicly accessible roads	Gravel/crushed limestone	9	46	0.1-15	6.4
	Dirt (i.e., local material compacted, bladed, and crowned)	8	24	0.83-68	11

[a] References 1, 5-16.

6.2.1 Emission Factors

The PM10 emission factors presented below are the outcomes from stepwise linear regressions of field emission test results of vehicles traveling over unpaved surfaces. For vehicles traveling on unpaved surfaces at industrial sites, PM10 emissions are estimated from the following empirical equation:

$$E = 1.5\,(s/12)^{0.9}\,(W/3)^{0.45} \qquad (1a)$$

and, for vehicles traveling on publicly accessible roads, dominated by light duty vehicles, PM10 emissions may be estimated from the following equation:

$$E = \frac{1.8\,(s/12)^{1.8}\,(S/30)^{0.5}}{(M/0.5)^{0.2}} - C \qquad (1b)$$

where

E = PM10 emission factor (lb/VMT)
s = surface material silt content (%)
W = mean vehicle weight (tons)
M = surface material moisture content (%)
S = mean vehicle speed (mph)
C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear.

The source characteristics s, W and M are referred to as correction parameters for adjusting the emission estimates to local conditions. The metric conversion from lb/VMT to grams (g) per vehicle kilometer traveled (VKT) is 1 lb/VMT = 281.9 g/VKT. Equations 1a and 1b have a quality rating of B if applied within the ranges of source conditions that were tested in developing the equations shown in Table 6-3.

Table 6-3. Range of Source Conditions Used in Developing Equations 1a and 1b

Emission factor	Surface silt content, %	Mean vehicle weight		Mean vehicle speed		Mean No. of wheels	Surface moisture content, %
		Mg	ton	km/hr	mph		
Industrial roads (Equation 1a)	1.8-25.2	1.8-260	2-290	8-69	5-43	4-17[a]	0.03-13
Public roads (Equation 1b)	1.8-35	1.4-2.7	1.5-3	16-88	10-55	4-4.8	0.03-13

As noted earlier, the models presented as Equations 1a and 1b were developed from tests of traffic on unpaved surfaces, mostly performed in the 1980s. Unpaved roads have a hard, generally nonporous surface that usually dries quickly after a rainfall or watering, because of traffic-enhanced natural evaporation. Factors influencing how fast a road dries are discussed in Section 6.5 below. A higher mean vehicle weight and a higher than normal traffic rate may be justified when performing a worst-case analysis of emissions from unpaved roads.

The PM2.5/PM10 ratio for fugitive dust from vehicles traveling on unpaved roads is 0.1.[23] The PM2.5 and PM10 emission factors for the exhaust, brake wear, and tire wear of a 1980's vehicle fleet (*C*) are shown in Table 6-4. They were obtained from EPA's MOBILE6.2 model.[24]

Table 6-4. Emission Factors for 1980's Vehicle Fleet Exhaust, Brake Wear, and Tire Wear

Particle size	*C*, Emission factor for exhaust, brake wear, and tire wear (lb/VMT)
PM2.5	0.00036
PM10	0.00047

A PM10 emission factor for the resuspension of fugitive dust from unpaved shoulders created by the wake of high-profile vehicles such as tractor-trailers traveling on paved roads at high speed has been developed by Desert Research Institute (DRI). A discussion of the emissions estimation methodology for fugitive dust originating from unpaved shoulders is presented in Chapter 14.

6.2.2 Source Extent

It is important to note that the vehicle-related source conditions refer to the average weight, speed, and number of wheels for all vehicles traveling the road. For example, if 98% of the traffic on the road are 2-ton cars and trucks while the remaining 2% consists of 20-ton trucks, then the mean weight is 2.4 tons. More specifically, Equations 1a and 1b are not intended to be used to calculate a separate emission factor for each vehicle class within a mix of traffic on a given unpaved road. That is, in the example, one should not determine one factor for the 2-ton vehicles and a second factor for the 20-ton trucks. Instead, only one emission factor should be calculated that represents the "fleet" average of 2.4 tons for all vehicles traveling the road. Moreover, to retain the quality ratings when addressing a group of unpaved roads, it is necessary that reliable correction parameter values be determined for the road in question. The field and laboratory procedures for determining road surface silt and moisture contents are given in Appendices C.1 and C.2 of AP-42. Vehicle-related parameters should be developed by recording visual observations of traffic. In some cases, vehicle parameters for industrial unpaved roads can be determined by reviewing maintenance records or other information sources at the facility.

In the event that site-specific values for correction parameters cannot be obtained, then default values may be used. In the absence of site-specific silt content information, an appropriate mean value from Tables 6-1 and 6-2 may be used as a default value, but the quality rating of the equation is reduced by two letters. Because of significant differences found between different types of road surfaces and between different areas of the country, use of the default moisture content value of 0.5 percent in Equation 1b is discouraged. The quality rating should be downgraded two letters when the default moisture content value is used. It is assumed that readers addressing industrial roads have access to the information needed to develop average vehicle information for their facility.

6.2.3 Natural Mitigation

The effect of routine watering to control emissions from unpaved roads is discussed below in Section 6.5. However, all roads are subject to some natural mitigation because of rainfall and other precipitation. The Equation 1a and 1b emission factors can be extrapolated to annual average uncontrolled conditions (but including natural mitigation) under the simplifying assumption that annual average emissions are inversely proportional to the number of days with measurable (more than 0.254 mm [0.01 inch]) precipitation:

$$E_{ext} = E[(365 - P)/365] \quad (2)$$

where,

E_{ext} = annual size-specific emission factor extrapolated for natural mitigation (lb/VMT)
E = emission factor from Equation 1a or 1b
P = number of days in a year with at least 0.254 mm (0.01 in) of precipitation

Maps showing the geographical distribution of "wet" days on an annual basis for the United States based on meteorological records on a monthly basis are available in the *Climatic Atlas of the United States*.[16] Alternative sources include other Department of Commerce publications such as local climatological data summaries. The National Climatic Data Center (NCDC) offers several products that provide hourly precipitation data. In particular, NCDC offers a *Solar and Meteorological Surface Observation Network 1961-1990* (SAMSON) CD-ROM, which contains 30 years worth of hourly meteorological data for first-order National Weather Service locations. Whatever meteorological data are used, the source of that data and the averaging period should be clearly specified.

Equation 2 provides an estimate that accounts for precipitation on an annual average basis for the purpose of inventorying emissions. It should be noted that Equation 2 does not account for differences in the temporal distributions of the rain events, the quantity of rain during any event, or the potential for the rain to evaporate from the road surface. In the event that a finer temporal and spatial resolution is desired for inventories of public unpaved roads, estimates can be based on a more complex set of assumptions. These assumptions include:

1. The moisture content of the road surface material is increased in proportion to the quantity of water added;
2. The moisture content of the road surface material is reduced in proportion to the Class A pan evaporation rate;
3. The moisture content of the road surface material is reduced in proportion to the traffic volume; and
4. The moisture content of the road surface material varies between the extremes observed in the area.

The CHIEF Web site (www.epa.gov/ttn/chief/ap42/ch13/related/c13s02-2) has a file that contains a spreadsheet program for calculating emission factors that are temporally and spatially resolved. Information required for use of the spreadsheet program includes monthly Class A pan evaporation values, hourly meteorological data for precipitation, humidity and snow cover, vehicle traffic information, and road surface material information.

It is emphasized that the simple assumption underlying Equation 2 and the more complex set of assumptions underlying the use of the procedure which produces a finer

temporal and spatial resolution have not been verified in any rigorous manner. For this reason, the quality ratings for either approach should be downgraded one letter from the rating that would be applied to Equation 1.

6.3 Emission Estimation: Alternate Methodology for Non-Farm Roads

This section was adapted from Section 7.10 of CARB's Emission Inventory Methodology. Section 7.10 was last updated in August 1997.

This source category provides estimates of the entrained geologic particulate matter emissions that result from vehicular travel over non-agricultural unpaved roads. The emissions are estimated separately for three major unpaved road categories: city and county roads, U.S. forests and park roads, and Bureau of Land Management (BLM) and Bureau of Indian Affairs (BIA) roads. The emissions result from the mechanical disturbance of the roadway and the vehicle generated air turbulence effects. Agricultural unpaved road estimates are computed in a separate methodology; see Section 6.4.

6.3.1 Emission Factor

The PM10 emission factor used for estimates of geologic dust emissions from vehicular travel on unpaved roads is based on work performed by UC Davis[28] and the Desert Research Institute.[29] The emission factor used for all unpaved roads statewide is 2.27 lbs PM10/VMT.[30] Because the emission measurements were performed in California, this emission factor was used by CARB to replace the previous generic emission factor provided in EPA's AP-42 document.[31] The new emission factor is slightly smaller than the factors derived with the AP-42 methodology. The PM2.5/PM10 ratio for unpaved road dust is 0.1.[23]

6.3.2 Source Extent (Activity Level)

For the purpose of estimating emissions, it is assumed that the unpaved road dust emissions are primarily related to the vehicle miles traveled (VMT) on the roads. State highway data are used to estimate unpaved road miles for each roadway category in each county. It is assumed that 10 daily VMT (DVMT) are traveled on unpaved city and county roads as well as U.S. forest and parks roads and BLM and BIA roads. Road mileage, if needed, can be simply computed by dividing the annual VMT values by 3650 (which is 10 DVMT x 365 days).

Daily activity on unpaved roads occurs primarily during daylight hours. Activity is assumed to be the same each day of the week. Monthly activity varies by county and is based on estimates of monthly rainfall in each county. This is to reflect that during wet months there is less unpaved road traffic, and there are also lower emissions per mile of road when the road soils have a higher moisture content. Unpaved road growth is tied to on-road VMT growth for many counties. For other counties, growth is set to zero and VMT is not used.

6.3.3 Assumptions and Limitations

CARB's methodology is subject to the following assumptions and limitations:

1. This methodology assumes that all unpaved roads emit the same levels of PM10 per VMT during all times of the year for all vehicles and conditions.
2. It is assumed that all unpaved roads receive 10 VMT per day.
3. This methodology assumes that no controls are used on the roads.
4. It is assumed that the emission factors derived in a test county are applicable to the rest of California.

6.4 Emission Estimation: Alternative Methodology for Farm Roads

This section was adapted from Section 7.11 of CARB's Emission Inventory Methodology. Section 7.11 was last updated in August 1997.

This source category provides estimates of the entrained geologic particulate matter emissions that result from vehicular travel over unpaved roads on agricultural lands. The emissions result from the mechanical disturbance of the roadway and the vehicle generated air turbulence effects. This emission factor used is oriented towards dust emissions from light duty vehicle use, but the activity data implicitly include some larger vehicle use for harvest and other operations.

6.4.1 Emission Factor

The PM10 emission factor used for estimates of geologic dust emissions from vehicular travel on unpaved roads is based on work performed by UC Davis[28] and the Desert Research Institute.[29] The emission factor used for all unpaved roads statewide is 2.27 lbs PM10/VMT.[30] Because the emission measurements were performed in California, this emission factor was used by CARB to replace the previous generic emission factor provided in EPA's AP-42 document.[31] CARB's emission factor is slightly smaller than the factors derived with the AP-42 methodology. The PM2.5/PM10 ratio for unpaved road dust is 0.1.[23]

6.4.2 Source Extent (Activity Level)

For the purpose of estimating emissions, it is assumed that the unpaved road dust emissions are primarily related to the vehicle miles traveled (VMT) on the roads. In 1976 an informal survey was made of several county agricultural commissioners in the San Joaquin Valley, who estimated that each 40 acres of cultivated land receives approximately 175 vehicle passes per year on the unpaved farm roads.[32] This value of 4.28 VMT/acre-year has been used in the past by CARB to calculate emissions from unpaved farm roads. CARB is now proposing the following estimates of source extent for unpaved farm roads for different crops: 0.38 VMT/acre-year for grapes, 0.40 VMT/acre-year for cotton, and 1.23 VMT/acre-year for citrus.[33]

The crop acreage data used to estimate the road dust emissions are from the state agency summary of crop acreage harvested.[34, 35] The acreage estimates do not include pasture lands because it is thought that the quantity of vehicular travel on these lands is minimal. Daily activity on unpaved roads occurs primarily during daylight hours. Activity is assumed to be the same each day of the week. Monthly activity varies by county and is based on estimates of monthly rainfall in each county. This is to reflect that during wet months there is less unpaved road traffic, and there are also lower emissions per mile of road when the road soils have a higher moisture content. Unpaved road growth for farm roads is based on agricultural crop acreage or agricultural production. This value is set to zero for many counties.

6.4.3 Assumptions and Limitations

CARB's methodology is subject to the following assumptions and limitations:

1. This methodology assumes that all unpaved farm roads emit the same levels of PM10 per VMT during all times of the year for all vehicles and conditions.
2. It is assumed that all unpaved farm roads receive 175 VMT per 40 acres per year for all crops and cultivation practices.
3. This methodology assumes that no controls are used on the roads.
4. It is assumed that the emission factors derived in the test area are applicable to the rest of California.
5. This methodology assumes that unpaved road travel associated with pasture lands is negligible.

6.5 Demonstrated Control Techniques

A wide variety of options exist to control emissions from unpaved roads. Options fall into the following three groupings:

1. Vehicle restrictions that limit the speed, weight or number of vehicles on the road
2. Surface improvement by measures such as (a) paving or (b) adding gravel or slag to a dirt road
3. Surface treatment such as watering or treatment with chemical dust suppressants

Available control options span broad ranges in terms of cost, efficiency, and applicability. For example, traffic controls provide moderate emission reductions (often at little cost) but are difficult to enforce. Although paving is highly effective, its high initial cost is often prohibitive. Furthermore, paving is not feasible for industrial roads subject to very heavy vehicles and/or spillage of material in transport. Watering and chemical suppressants, on the other hand, are potentially applicable to most industrial roads at moderate to low costs. However, these require frequent reapplication to

maintain an acceptable level of control. Chemical suppressants are generally more cost-effective than water but not in cases of temporary roads (which are common at mines, landfills, and construction sites). In summary, then, one needs to consider not only the type and volume of traffic on the road but also how long the road will be in service when developing control plans.

Vehicle restrictions. These measures seek to limit the amount and type of traffic present on the road, or to lower the mean vehicle speed. For example, many industrial plants have restricted employees from driving on plant property and have instead instituted bussing programs. This eliminates emissions due to employees traveling to/from their worksites. Although the heavier average vehicle weight of the busses increases the base emission factor, the decrease in vehicle-miles-traveled results in a lower overall emission rate.

Surface improvements. Control options in this category alter the road surface. As opposed to "surface treatments" discussed below, improvements are relatively "permanent" and do not require periodic retreatment. The most obvious surface improvement is paving an unpaved road. This option is quite expensive and is probably most applicable to relatively short stretches of unpaved road with at least several hundred vehicle passes per day. Furthermore, if the newly paved road is located near unpaved areas or is used to transport material, it is essential that the control plan address routine cleaning of the newly paved road surface. The control efficiencies achievable by paving can be estimated by comparing emission factors for unpaved and paved road conditions. The predictive emission factor equation for paved roads, given in Chapter 5, requires estimation of the silt loading on the traveled portion of the paved surface, which in turn depends on whether the pavement is periodically cleaned. Unless curbing is to be installed, the effects of vehicle excursion onto unpaved shoulders (berms) also must be taken into account in estimating the control efficiency of paving.

Other surface improvement methods involve covering the road surface with another material that has a lower silt content. Examples include placing gravel or slag on a dirt road. The control efficiency can be estimated by comparing the emission factors obtained using the silt contents before and after improvement. The silt content of the road surface should be determined after 3 to 6 months rather than immediately following placement. Control plans should address regular maintenance practices, such as grading, to retain larger aggregate on the traveled portion of the road.

Surface treatments. These measures refer to control options that require periodic reapplication. Treatments fall into the two main categories of:

(a) wet suppression (i.e., watering, possibly with surfactants or other additives), which keeps the road surface wet to control emissions, and
(b) chemical stabilization that attempts to change the physical characteristics of the surface.

The necessary reapplication frequency varies from minutes or hours for plain water under summertime conditions to several weeks or months for chemical dust suppressants.

Wet Suppression. Watering increases the moisture content, which in turn causes particles to conglomerate and reduces their likelihood of becoming suspended when vehicles pass over the surface. The control efficiency depends on how fast the road dries after water is added. This in turn depends on: (a) the amount (per unit road surface area) of water added during each application; (b) the period of time between applications; (c) the weight, speed and number of vehicles traveling over the watered road during the period between applications; and (d) meteorological conditions (temperature, wind speed, cloud cover, etc.) that affect evaporation during the period. Figure 6-1 presents a simple bilinear relationship between the instantaneous control efficiency due to watering and the resulting increase in surface moisture. The moisture ratio "M" (i.e., the x-axis in Figure 6-1) is found by dividing the surface moisture content of the watered road by the surface moisture content of the uncontrolled road. As the watered road surface dries, both the ratio M and the predicted instantaneous control efficiency (i.e., the y-axis in the figure) decrease. The figure shows that between the uncontrolled moisture content (M = 1) and a value twice as large (M = 2), a small increase in moisture content results in a large increase in control efficiency. Beyond that, control efficiency grows slowly with increased moisture content.

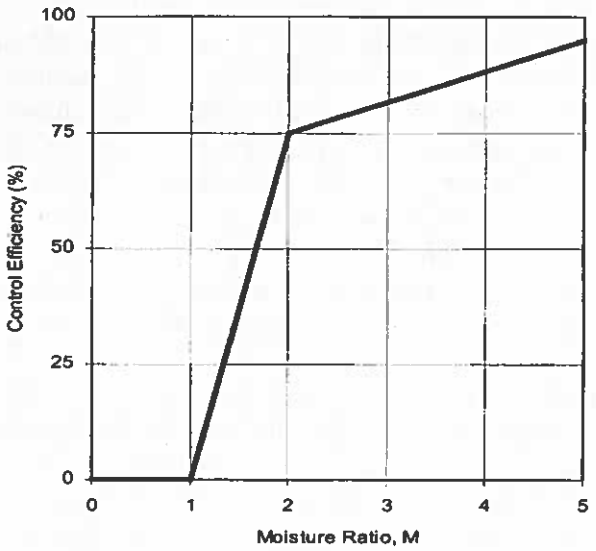

Figure 6-1. Watering Control Effectiveness for Unpaved Travel Surfaces

Given the complicated nature of how the road dries, characterization of emissions from watered roadways is best done by collecting road surface material samples at various times between water truck passes. AP-42 Appendices C.1 and C.2 present the recommended sampling and analysis procedures, respectively, for determining the surface/bulk dust loading. The moisture content measured can then be associated with a control efficiency by use of Figure 6-1. Samples that reflect average conditions during the watering cycle can take the form of either a series of samples between water applications or a single sample at the midpoint. It is essential that samples be collected during periods with active traffic on the road. Finally, because of different evaporation rates, it is recommended that samples be collected at various times during the year. If

only one set of samples is to be collected, these must be collected during hot, summertime conditions.

When developing watering control plans for roads that do not yet exist, it is strongly recommended that the moisture cycle be established by sampling similar roads in the same geographic area. If the moisture cycle cannot be established by similar roads using established watering control plans, the more complex methodology used to estimate the mitigation of rainfall and other precipitation can be used to estimate the control provided by routine watering. An estimate of the maximum daytime Class A pan evaporation (based upon daily evaporation data published in the monthly Climatological Data for the state by the National Climatic Data Center) should be used to insure that adequate watering capability is available during periods of highest evaporation. Hourly precipitation values are replaced by the equivalent inches of precipitation resulting fro watering. One inch of precipitation is equivalent to an application of 5.6 gallons of water per square yard of road. Information on the long term average annual evaporation and on the percentage that occurs between May and October is available in the Climatic Atlas.[16] This methodology should be used only for prospective analyses and for designing watering programs for existing roadways. The quality rating of an emission factor for a watered road that is based on this methodology should be downgraded two letters. Periodic road surface samples should be collected and analyzed to verify the efficiency of the watering program.

Chemical Dust Suppressants. As opposed to wet suppression (i.e., watering), chemical dust suppressants have much less frequent reapplication requirements. These materials suppress emissions by changing the physical characteristics of the existing road surface material. Many chemical dust suppressants applied to unpaved roads form a hardened surface that binds particles together. After several applications, a treated unpaved road often resembles a paved road except that the surface is not uniformly flat. Because the improved surface results in more grinding of small particles, the silt content of loose material on a highly controlled surface may be substantially higher than when the surface was uncontrolled. For this reason, the models presented as Equations 1a and 1b cannot be used to estimate emissions from chemically stabilized roads. Should the road be allowed to return to an uncontrolled state with no visible signs of large-scale cementing of material, the Equation 1a and 1b emission factors could then be used to obtain conservatively high emission estimates.

The control effectiveness of chemical dust suppressants appears to depend on: (a) the dilution rate used in the mixture; (b) the application rate (volume of solution per unit road surface area); (c) the time between applications; (d) the size, speed and amount of traffic during the period between applications; and (e) meteorological conditions (rainfall, freeze/thaw cycles, etc.) during the period. Other factors that affect the performance of chemical dust suppressants include other traffic characteristics (e.g., cornering, track-out from unpaved areas) and road characteristics (e.g., bearing strength, grade). The variability in these factors and differences between individual dust control products make the control efficiencies of chemical dust suppressants difficult to estimate. Past field testing of emissions from controlled unpaved roads has shown that chemical dust

suppressants provide a PM10 control efficiency of about 80% when applied at regular intervals of 2 weeks to 1 month.

Petroleum resin products historically have been the dust suppressants (besides water) most widely used on industrial unpaved roads. Figure 6-2 presents a method to estimate average control efficiencies associated with petroleum resins applied to unpaved roads.[20] The following items should be noted:

1. The term "ground inventory" represents the total volume (per unit area) of petroleum resin concentrate (not solution) applied since the start of the dust control season.
2. Because petroleum resin products must be periodically reapplied to unpaved roads, the use of a time-averaged control efficiency value is appropriate. Figure 6-2 presents control efficiency values averaged over two common application intervals, 2 weeks and 1 month. Other application intervals will require interpolation.
3. Note that zero efficiency is assigned until the ground inventory reaches 0.05 gallon per square yard (gal/yd^2). Requiring a minimum ground inventory ensures that one must apply a reasonable amount of chemical dust suppressant to a road before claiming credit for emission control. Recall that the ground inventory refers to the amount of petroleum resin concentrate rather than the total solution.

As an example of the application of Figure 6-2, suppose that Equation 1a was used to estimate a PM10 emission factor of 7.1 lb/VMT from a particular road. Also, suppose that, starting on May 1, the road is treated with 0.221 gal/yd^2 of a solution (1 part petroleum resin to 5 parts water) on the first of each month through September. The average controlled PM10 emission factors calculated from Figure 6-2 are shown in Table 6-5.

Besides petroleum resins, other newer dust suppressants have also been successful in controlling emissions from unpaved roads. Specific test results for those chemicals, as well as for petroleum resins and watering, are provided in References 18 through 21.

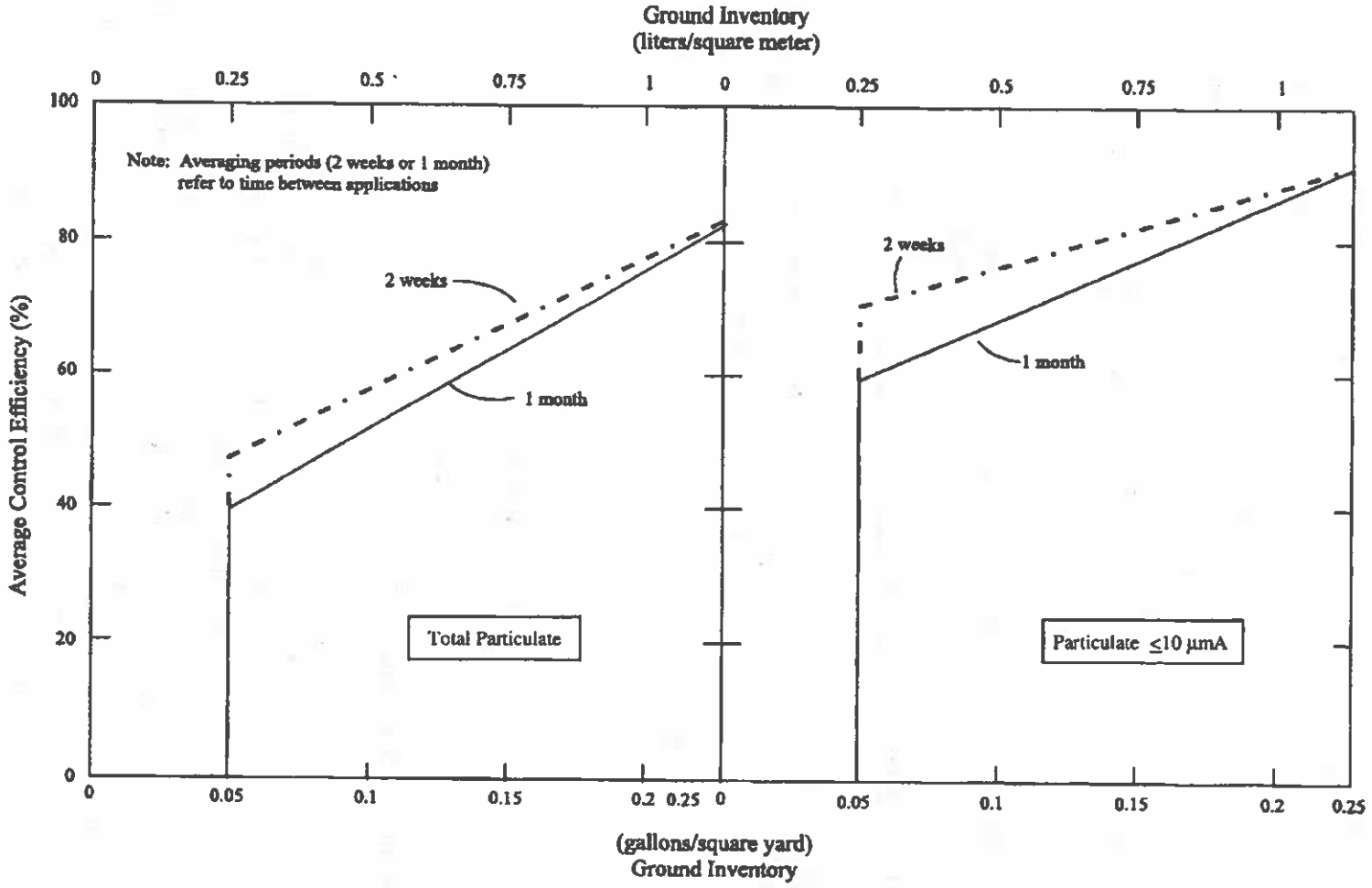

Figure 6-2. Average TSP and PM10 Control Efficiencies for Two Common Application Intervals

Table 6-5. Average Controlled PM10 Emission Factors for Specific Conditions

Period	Ground inventory, gal/yd^2	Average control efficiency, %[a]	Average controlled PM10 emission factor, lb/VMT
May	0.037	0	7.1
June	0.073	62	2.7
July	0.11	68	2.3
August	0.15	74	1.8
September	0.18	80	1.4

[a] From Figure 6-2. Zero efficiency assigned if ground inventory is less than 0.05 gal/yd^2.

1 lb/VMT = 281.9 g/VKT. 1 gal/yd^2 = 4.531 L/m^2.

Table 6-6 summarizes tested control measures and reported control efficiencies for measures that reduce the generation of fugitive dust from unpaved roads.

Table 6-6. Control Efficiencies for Control Measures for Unpaved Roads[36, 37]

Control measure	PM10 control efficiency	References/Comments
Limit maximum speed on unpaved roads to 25 miles per hour	44%	Assumes linear relationship between PM10 emissions and vehicle speed and an uncontrolled speed of 45 mph.
Pave unpaved roads and unpaved parking areas	99%	Based on comparison of paved road and unpaved road PM10 emission factors.
Implement watering twice a day for industrial unpaved road	55%	MRI, April 2001
Apply dust suppressant annually to unpaved parking areas	84%	CARB April 2002

6.6 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. Regulatory formats specify the threshold source size that triggers the need for control application. Example regulatory formats downloaded from the Internet for several local air quality agencies in the WRAP region are presented in Table 6-7. The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: www.maricopa.gov/envsvc/air/ruledesc.asp

Table 6-7. Example Regulatory Formats for Unpaved Roads

Control Measure	Goal	Threshold	Agency
Requires annual treatment of unpaved public roads beginning in 1998 and continuing for each of 8 years thereafter by implementing one of the following: paving at least one mile with typical roadway material, applying chemical stabilizers to at least two miles to maintain stabilized surface, implementing at least one of the following on at least three miles of road surface: installing signage at 1/4 mile intervals limiting speed to 15 mph, installing speed control devices every 500 ft, or maintaining roadway to limit speed to 15 mph		Set applicability standard: unpaved road must be more than 50 ft wide at all points or must not be within 25 ft of property line, or have more than 20 vehicle trips per day. All roads with average daily traffic greater than average of all unpaved roads within its jurisdiction must be treated	SCAQMD Rule 1186 9/10/1999
Control measures implemented by June 1, 2003: pave, apply dust palliative, or other	Complies with stabilization standard: limit visible dust emissions to 20% opacity, limit silt loading to 0.33 oz/ft2, and limit silt content to 6%	All unpaved roads with vehicular traffic 150 vehicles or more per day	Clark County Hydrographic Basins 212, 216, 217 Sect. 91 Air Quality Reg. 06/22/2000
Limit vehicle speed </=15mph and </=20 trips/day; BACM: watering, paving, apply/maintain gravel, asphalt, or dust suppressant; Dust control plan for construction site roads	Limit VDE to 20% opacity; limit silt loading to 0.33oz/ft^2, limit silt content to 6%	Construction site roads, inactive/active; limiting vehicle speed and trips is alternative to stabilization requirement and max number of trips each day in control plan (also number of vehicles, earthmoving equip, etc.); for roads with >/=150 vehicles/day implement BACM by 06/10/2004; same for >/=250 vehicles day (existing roads by 06/10/2000)	Maricopa County Rules 310 and 310.01 04/07/2004 and 02/16/2000

6.7 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations. An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Table 6-8 summarizes the compliance tools that are applicable for unpaved roads.

Table 6-8. Compliance Tools for Unpaved Roads

Record keeping	Site inspection/monitoring
Road map; traffic volumes, speeds, and patterns; dust suppression equipment and maintenance records; frequencies, amounts, times, and rates for watering and dust suppressants (type); use of water surfactants; calculated control efficiencies; regrading, graveling, or paving of unpaved road segments; control equipment downtime and maintenance records; meteorological log.	Observation of water truck operation and inspection of sources of water; observation of dust plume opacity exceeding a standard; counting of traffic volumes; surface material sampling and analysis for silt and moisture contents; real-time portable monitoring of PM.

6.8 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for fugitive dust originating from unpaved roads. A sample cost-effectiveness calculation is presented below for a specific control measure (watering) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In

selecting the most advantageous control measure for unpaved roads, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Unpaved Roads at an Industrial Facility

Step 1. Determine source activity and control application parameters.

Road length (mile)	2
Vehicles/day	100
Wet days/year	20
Number of 8-hour workdays/year	260
Number of emission days/yr (workdays without rain)	240
Control Measure	Watering
Control Application/Frequency	Twice daily*
Economic Life of Control System (year)	10
Control Efficiency	55%

* No nighttime traffic.

The number of vehicles per day, wet days per year, workdays per year, and the economic life of the control measure are assumed values for illustrative purposes. Watering has been chosen as the applied control measure. The control application/frequency and control efficiency are default values provided by MRI, 2001.[35]

Step 2. Calculate PM10 Emission Factor. The PM10 emission factor is calculated from the AP-42 equation utilizing the appropriate correction parameters.

$$E\ (lb/VMT) = 1.5\ (s/12)^{0.9}\ (W/3)^{0.45}$$

s—silt content (%)	15
W—vehicle weight (tons)	15

E = 3.8 lb/VMT

Step 3. Calculate Uncontrolled PM Emissions. The PM10 emission factor (calculated in Step 2) is multiplied by the number of vehicles per day, by the road length and by the number of emission days per year (see activity data) and divided by 2,000 lb/ton to compute the annual PM10 emissions, as follows:

Annual PM10 emissions = (EF x Vehicles/day x Miles x Emission days/yr) / 2,000
Annual PM10 emissions = (3.8 x 100 x 2 x 240) / 2,000 = 91 tons

Annual PM2.5 emissions = 0.1 x PM10 Emissions[23]
Annual PM2.5 emissions = 0.1 x 91 tons = 9.1 tons

Step 4. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) are equal to the uncontrolled emissions (calculated above in Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency).

For this example, we have selected watering as our control measure. Based on a control efficiency estimate of 55% for the application of water to unpaved roads, the annual controlled emissions estimate are calculated to be:

Annual Controlled PM10 emissions = (91 tons) x (1 – 0.55) = 41 tons
Annual Controlled PM2.5 emissions = (9.1 tons) x (1 – 0.55) = 4.1 tons

Step 5. Determine Annual Cost to Control PM Emissions.

Capital costs ($)	30,000
Annual Operating/Maintenance costs ($)	8,000
Annual Interest Rate	3%
Capital Recovery Factor	0.1172
Annualized Cost ($/yr)	11,517

The capital costs, annual operating and maintenance costs, and annual interest rate (AIR) are assumed values for illustrative purposes. The Capital Recovery Factor (CRF) is calculated from the Annual Interest Rate (AIR) and the Economic Life of the control system, as follows:

$$\text{Capital Recovery Factor} = AIR \times (1 + AIR)^{\text{Economic life}} / (1 + AIR)^{\text{Economic life}} - 1$$

$$\text{Capital Recovery Factor} = 3\% \times (1 + 3\%)^{10} / (1 + 3\%)^{10} - 1 = 0.1172$$

The Annualized Cost is calculated by adding the product of the Capital Recovery Factor and the Capital costs to the annual Operating/Maintenance costs:

Annualized Cost = (CRF x Capital costs) + Annual Operating/Maintenance costs
Annualized Cost = (0.1172 x 30,000) + 8,000 = $11,517

Step 6. Calculate Cost Effectiveness. Cost effectiveness is calculated by dividing the annualized cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions:

Cost effectiveness = Annualized Cost/ (Uncontrolled emissions – Controlled emissions)

Cost effectiveness for PM10 emissions = $11,517 / (91 - 41) = $231/ton
Cost effectiveness for PM2.5 emissions = $11,517 / (9.1 – 4.1) = $2,306/ton

6.9 References

1. Cowherd, C. Jr., *et al.,* 1974. *Development of Emission Factors for Fugitive Dust Sources,* EPA-450/3-74-037, U. S. EPA, Research Triangle Park, NC, June.

2. Dyck, R.J., Stukel, J.J., 1976. *Fugitive Dust Emissions from Trucks on Unpaved Roads*, Envir. Sci. & Tech., *10*(10):1046-1048, October.

3. McCaldin, R.O., Heidel, K.J., 1978. *Particulate Emissions from Vehicle Travel over Unpaved Roads*, presented at APCA Assoc. Meeting, Houston, TX, June.

4. Cowherd, C. Jr., *et al.,* 1979. *Iron and Steel Plant Open Dust Source Fugitive Emission Evaluation*, EPA-600/2-79-013, U. S. EPA, Cincinnati, OH, May.

5. Muleski, G., 1991. *Unpaved Road Emission Impact*, Arizona Department of Environmental Quality, Phoenix, AZ, March 1991.

6. MRI, 1998. *Emission Factor Documentation for AP-42, Section 13.2.2, Unpaved Roads, Final Report*, Midwest Research Institute, Kansas City, MO, September.

7. Cuscino, T. Jr., *et al.*, 1979. *Taconite Mining Fugitive Emissions Study*, Minnesota Pollution Control Agency, Roseville, MN, June.

8. MRI, 1984. *Improved Emission Factors for Fugitive Dust from Western Surface Coal Mining Sources*, 2 Volumes, EPA Contract No. 68-03-2924, Office of Air Quality Planning and Standards, U. S. EPA, Research Triangle Park, NC.

9. Cuscino, T. Jr., *et al.*, 1983. *Iron and Steel Plant Open Source Fugitive Emission Control Evaluation*, EPA-600/2-83-110, U. S. EPA, Cincinnati, OH, October.

10. MRI, 1983. *Size Specific Emission Factors for Uncontrolled Industrial and Rural Roads*, EPA Contract No. 68-02-3158, Midwest Research Institute, Kansas City, MO, September.

11. Cowherd, C. Jr., Englehart, P., 1985. *Size Specific Particulate Emission Factors for Industrial and Rural Roads*, EPA-600/7-85-038, U. S. EPA, Cincinnati, OH, September.

12. MRI, 1987. *PM10 Emission Inventory of Landfills in the Lake Calumet Area*, EPA Contract 68-02-3891, Work Assignment 30, Midwest Research Institute, Kansas City, MO, September.

13. MRI, 1988. *Chicago Area Particulate Matter Emission Inventory - Sampling and Analysis*, EPA Contract No. 68-02-4395, Work Assignment 1, Midwest Research Institute, Kansas City, MO, May.

14. ES, 1987. *PM10 Emissions Inventory Data for the Maricopa and Pima Planning Areas*, EPA Contract No. 68-02-3888, Engineering-Science, Pasadena, CA, January.

15. MRI, 1992. *Oregon Fugitive Dust Emission Inventory*, EPA Contract 68-D0-0123, Midwest Research Institute, Kansas City, MO, January.

16. *Climatic Atlas of the United States*, U. S. Department Of Commerce, Washington, DC, June 1968.

17. National Climatic Data Center, *Solar and Meteorological Surface Observation Network 1961-1990*; 3 Volume CD-ROM. Asheville, NC, 1993.

18. Cowherd, C. Jr. *et al.*, 1988. *Control of Open Fugitive Dust Sources*, EPA-450/3-88-008, U. S. EPA, Research Triangle Park, NC, September.

19. Muleski, G.E. *et al.*, 1984. *Extended Evaluation of Unpaved Road Dust Suppressants in the Iron and Steel Industry*, EPA-600/2-84-027, U.S. EPA, Cincinnati, OH, February.

20. Cowherd, C. Jr., Kinsey, J.S., 1986. *Identification, Assessment and Control of Fugitive Particulate Emissions*, EPA-600/8-86-023, U.S. EPA, Cincinnati, OH, August.

21. Muleski, G.E., Cowherd, C. Jr., 1986. *Evaluation of the Effectiveness of Chemical Dust Suppressants on Unpaved Roads*, EPA-600/2-87-102, U.S. EPA, Cincinnati, OH, November.

22. MRI, 1992. *Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures*, EPA-450/2-92-004, Office Of Air Quality Planning and Standards, U.S. EPA, Research Triangle Park, NC, September.

23. MRI, 2006. Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Emission Factors, prepared for the WRAP by Midwest Research Institute, Project No. 110397, February 1.

24. Technical Memorandum from P. Hemmer, E.H. Pechan & Associates, Inc., Durham, NC to B. Kuykendal, U.S. EPA, Research Triangle Park, NC, August, 21, 2003.

25. USEPA, 2002. *MOBILE6 User Guide*, United States Environmental Protection Agency, Office of Transportation and Air Quality. EPA420-R-02-028, October.

26. Technical Memorandum from G. Muleski, Midwest Research Institute, Kansas City, MO, to B. Kuykendal, U. S. EPA, Research Triangle Park, NC, Subject "Unpaved Roads," September 27, 2001.

27. Technical Memorandum from W. Kuykendal, U.S. EPA, to File, Subject "Decisions on Final AP-42 Section 13.2.2 Unpaved Roads," November 24, 2003.

28. Flocchini, R. et al., 1994. *Evaluation of the Emission of PM Particulates from Unpaved 10 Roads in the San Joaquin Valley, Final Report*, University of California, Davis, Air Quality Group, Crocker Nuclear Laboratory, April.

29. Gillies, J. et al., 1996. *Effectiveness Demonstration of Fugitive Dust Control Methods for Public Unpaved Roads and Unpaved Shoulders on Paved Roads, Final Report*, Desert Research Institute, December.

30. Gaffney, P., 1997. *Entrained Dust from Unpaved Road Travel, Emission Estimation Methodology, Background Document,* California Air Resources Board, September.

31. USEPA, 1995. *Compilation of Air Pollutant Emission Factors*, AP-42, Section 13.2.2, Fifth Edition, January.

32. Bill Roddy, Fresno County Air Pollution Control District, personal communication to CARB, 1976.

33. Gaffney, P., 2005. *Agricultural Dust Emissions: Summary of Sources and Processes,* WRAP Fugitive Dust Control Workshop, Palm Springs, CA, May 10-11.

34. California Agricultural Statistics Service, 1996. 1993 acreage extracted from agricultural commissioner's reports. Sacramento, CA, December.

35. Gaffney, P.H., 1997. *Agricultural Land Preparation: Geologic Particulate Matter Emission Estimates, Background Document*, California Air Resources Board, September.

36. MRI, April 2001. *Particulate Emission Measurements from Controlled Construction Activities,* EPA/600/R-01/031.

37. CARB, April 2002. *Evaluation of Air Quality Performance Claims for Soil-Sement Dust Suppressant.*

38. Sierra Research, 2003. *Final BACM Technological and Economic Feasibility Analysis,* prepared for the San Joaquin Valley Unified APCD, March.

Chapter 7. Agricultural Wind Erosion

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7.1 Characterization of Source Emissions

Wind blowing across exposed nonpasture agricultural land results in particulate matter (PM) emissions. Windblown dust emissions from agricultural lands are calculated by multiplying the process rate (acres of crop in cultivation) by an emission factor (tons of PM per acre per year).

7.2 Emission Estimation Methodology [1-13]

This section was adapted from Section 7.12 of CARB's Emission Inventory Methodology. Section 7.12 was last updated in July 1997.

MRI developed a PM10 emission factor for agricultural wind blown dust of 86.6 lb/acre on behalf of the EPA in 1992.[1] However this emission factor is not included in AP-42. Thus, the methodology adopted by the California Air Resources Board[2,3] (CARB) is presented as the emissions estimation methodology in lieu of an official EPA methodology for this fugitive dust source category. The methodology for estimating fugitive dust emissions from open area wind erosion is presented in Chapter 8 of this handbook.

The standard methodology for estimating the emission factor for windblown emissions from agricultural lands is the wind erosion equation (WEQ). Although the WEQ is well established, it is controversial. The WEQ was developed by the United States Department of Agriculture-Agricultural Research Service (USDA-ARS) during the 1960s, for the estimation of wind erosion on agricultural land.[4,5] The U.S. EPA adapted the USDA-ARS methodology for use in estimating windblown TSP emissions from agricultural lands in 1974[5], and the California Air Resources Board (CARB) adopted the U.S. EPA methodology in 1989. The PM10/TSP ratio for wind erosion is 0.5.[6] The PM2.5/PM10 ratio for windblown fugitive dust posted on EPA's CHIEF website is 0.15 based on the analysis conducted by MRI on behalf of WRAP.[7]

The USDA-ARS has undertaken ambitious programs over the past decade to replace the WEQ with improved wind erosion prediction models such as the Revised Wind Erosion Equation (RWEQ)[8] and the Wind Erosion Prediction System (WEPS)[9] models. CARB does not consider these models feasible for use, although certain portions of the RWEQ were incorporated into the CARB methodology in 1997. According to CARB, the WEQ (with modifications) continues to be the best available, feasible method for estimating windblown agricultural emissions.

7.2.1 Summary of CARB's Wind Erosion Equation (ARBWEQ)

Much of the controversy surrounding the WEQ has related to its tendency to produce inflated emission estimates. Some of the reasons for the inflated emissions relate to the fact that it was developed in the Midwestern United States, and that it does not take into account many of the environmental conditions and farm practices specific to the West. In the revised methodology developed by CARB (referred to as the ARBWEQ), CARB staff added adjustments to the WEQ to improve its ability to estimate windblown emissions from western agricultural lands.

The U.S. EPA-modified version of the USDA-ARS derived wind erosion equation (WEQ) reads as follows:[6]

$$E_S = A\ I\ K\ C\ L'\ V' \quad (1)$$

where, E_S = total suspended particulate fraction of wind erosion losses of tilled fields (tons TSP/acre/year)
A = portion of total wind erosion losses that would be measured as total suspended particulate, estimated to be 0.025
I = soil erodibility (tons/acre/year)
K = surface roughness factor (dimensionless)
C = climatic factor (dimensionless)
L' = unsheltered field width factor (dimensionless)
V' = vegetative cover factor (dimensionless)

As an aid in understanding the mechanics of this equation, the soil erodibility factor I may be thought of as the basic erodibility of a flat, very large, bare field in a climate highly conducive to wind erosion (i.e., high wind speeds and high temperature with little precipitation). This factor was initially established for the WEQ for a large, flat, bare field in Kansas that has relatively high winds along with hot summers and low precipitation. The parameters K, C, L' and V' may be thought of as reduction factors for a ridged surface, a climate less conducive to wind erosion, smaller-sized fields, and vegetative cover, respectively, to adjust the equation for applicability to field conditions that differ from the original Kansas field. The A factor in Equation 1 has been used in the ARBWEQ without modification. There has been concern that this factor doesn't take into account finite dust loading. The RWEQ[8] and WEPS[9] models are attempting to address that concern.

Soil Erodibility, I. Soil erodibility by the wind is a function of the amount of erodible fines in the soil. The largest soil aggregate size normally considered to be erodible is approximately 0.84 mm equivalent diameter. The soil erodibility factor, I, is related to the percentage of dry aggregates greater than 0.84 mm as shown in Figure 7-1.[6] The percentage of nonerodible aggregates (and by difference the amount of fines) in a soil sample can be determined experimentally by a standard dry sieving procedure, using a No. 20 U.S. Bureau of Standards sieve with 0.84 mm square openings. For areas larger than can be field sampled for soil aggregate size (e.g., a county) or in cases where soil particle size distributions are not available, a representative value of I can be obtained from the predominant soil type(s) for farmland in the area. Measured erodibilities, I (in units of tons/acre-year), of various soil textural classes are presented in Table 7-1 as a function of percent of dry soil aggregates greater than 0.84 mm in diameter.[6] For California, the soil textural classes were determined by CARB staff from University of California soil maps.[10] An additional level of detail was included in the ARBWEQ by using the United States Department of Agriculture-Natural Resources Conservation Service's (NRCS) State Geographic Data Base (STATSGO) of soil data.[11] In addition, the USDA-ARS recommended an adjustment for changes to long term erodibility due to irrigation.[12] This affects a property known as cloddiness, and refers to the increased tendency for a soil to form stable agglomerations after being exposed to irrigation water.

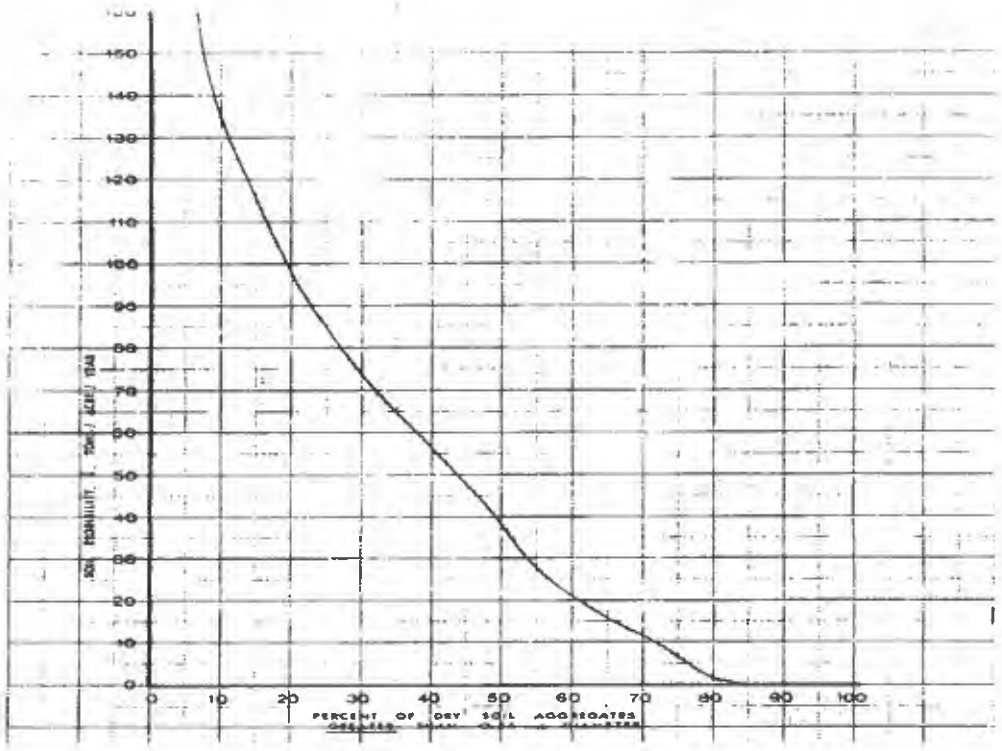

Figure 7-1. Soil Erodibility as a Function of Particle Size[6]

Table 7-1. Soil Erodibility, I, for Various Soil Textural Classes[6]

Predominant Soil Textural Class	Erodibility (tons/acre-year)
Sand	220
Loamy sand	134
Sandy loam, clay, silty clay	86
Loam, sandy clay loam, sandy clay	56
Silty loam, clay loam	47
Silty clay loam, silt	38

Surface Roughness Factor, K. The surface roughness factor, K, accounts for the resistance to wind erosion provided by ridges and furrows or large clods in the field and is crop specific. The surface roughness factor, K, is a function of the height and spacing of the ridges, and varies from 1.0 (no reduction) for a field with a smooth surface to a minimum of 0.5 for a field with the optimum ratio of ridge height (h) to ridge spacing (w). The relationship between K and h^2/w is shown in Figure 7-2.[6] Average K values of common field crops are shown in Table 7-2. Similar crops are assigned similar surface roughness values.

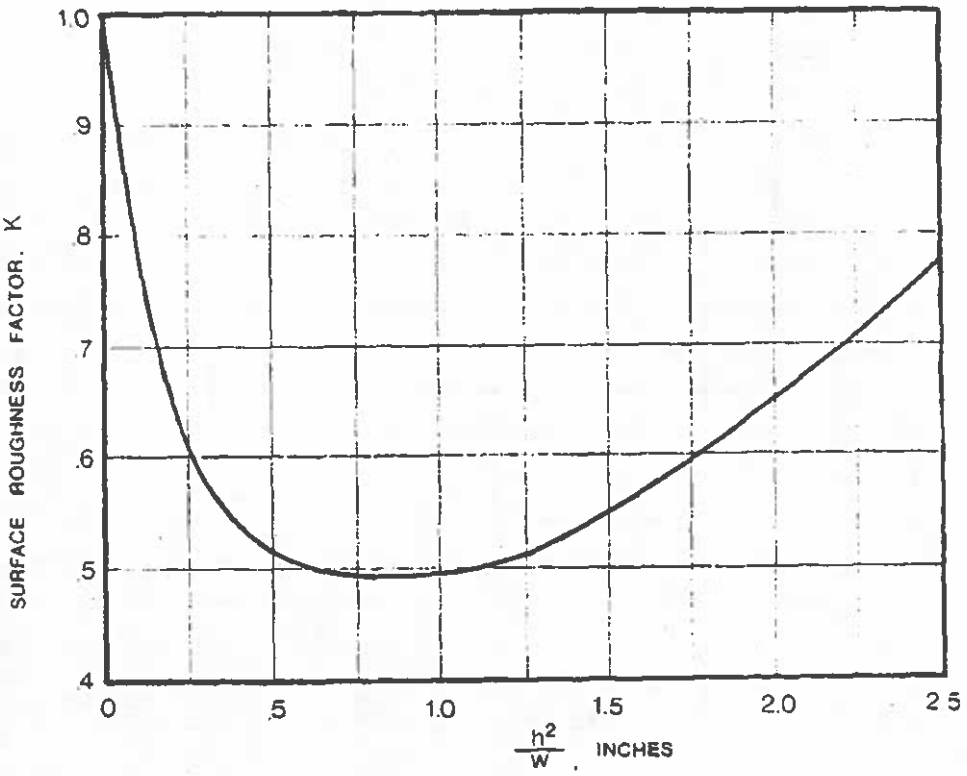

Figure 7-2. Determination of Surface Roughness Factor, K[6]

Table 7-2. Surface Roughness Factor, K, for Common Field Crops[6]

Crop	K
Alfalfa, safflower	1.0
Grain hays, oats, potatoes, rice	0.8
Barley, corn, peanuts, rye, soybeans, sugar beets, vegetables, wheat	0.6
Beans, cotton, sorghum	0.5

Climatic Factor, C. The annual climatic factor, C, is based on data that show that erosion varies directly with the wind speed cubed, and as the inverse of the square of surface soil moisture. The C factor can be calculated from the following equation:

$$C = 0.345\ W^3 / (PE)^2 \qquad (2)$$

where, W = mean annual wind speed (mph), corrected to a standard height of 10 meters
PE = Thornthwaite's precipitation-evaporation index (i.e., ratio of precipitation to evapotranspiration)

Monthly or seasonal climatic factors can be estimated from Equation 2 by substituting the mean wind speed of the period of interest for the mean annual wind speed. Climatic factors have been computed from National Weather Bureau data for

many locations throughout the country. The annual climatic factors for many areas of the US are shown in Figure 7-3. The monthly precipitation/evaporation ratio varies from <16 for arid deserts to >127 for rain forests. For the ARBWEQ, CARB staff improved the input data for calculating the factor C, as well as the methods associated with developing the county wide averaged annual climatic factor. Monthly climatic factors were obtained by modifying the annual climatic factor calculation method. Annual climatic factors for different counties within California range from 0.019 to 1.274.[14] The reader is directed to CARB's website to obtain the list of climatic factors for counties within California (www.arb.ca.gov/emisinv/areasrc/fullpdf).

Unsheltered Field Width Factor, L'. Soil erosion across a field is directly related to the unsheltered width along the prevailing wind direction. The rate of erosion is zero at the windward edge of the field and increases approximately proportionately with distance downwind until, if the field is large enough, a maximum rate of soil movement is reached. Correlation between the width of a field and its rate of erosion is also affected by the soil erodibility of its surface: the more erodible the surface, the shorter the distance in which maximum soil movement is reached. This relationship between the unsheltered width of a field (L), its surface erodibility (IK), and its relative rate of soil erosion (L') is shown graphically for different values of IK (ranging from IK = 20 to IK = 134) in Figure 7-4.[6] If the curves of Figure 7-4 are used to obtain the L' factor for the windblown dust equation, values for the variables I and K must already be known and an appropriate value for L most be determined.

L is calculated as the distance across the field in the prevailing wind direction minus the distance from the windward edge of the field that is protected from wind erosion by a barrier. The distance protected by a barrier is equal to 10 times the height of the barrier, or 10H. For example, a row of 30-foot high trees along the windward side of a field reduces the effective width of the field by 300 feet. If the prevailing wind direction differs significantly (>25 degrees) from perpendicularity with the field. L should be increased to account for this additional distance of exposure to the wind. The distance across the field, L, is equal to the field width divided by the cosine of the angle between the prevailing wind direction and the perpendicularity to the field.

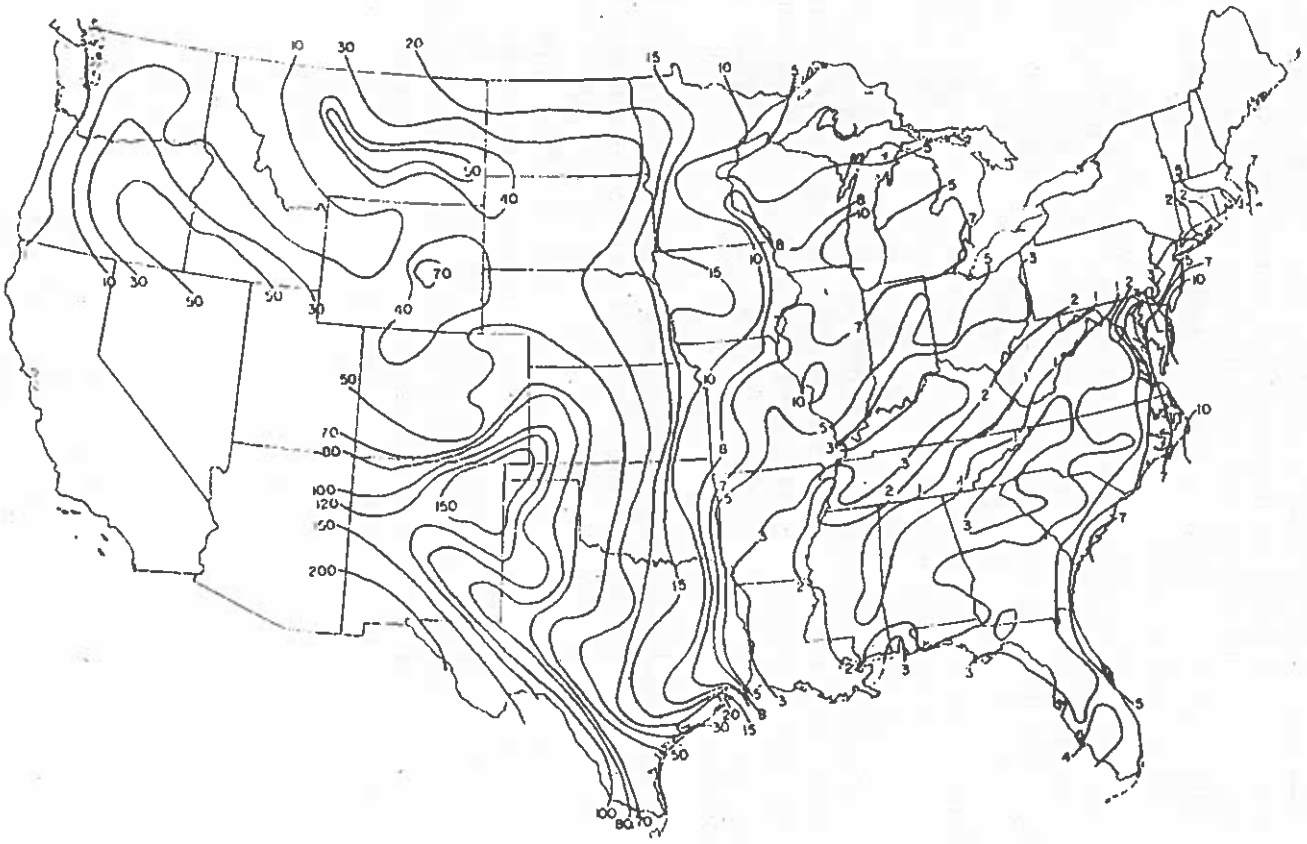

Figure 7-3. Annual Climatic Factor Used in Wind Erosion Equation[6]

[Note: Isopleths for several western and northeastern states were not available at the time this figure was prepared.]

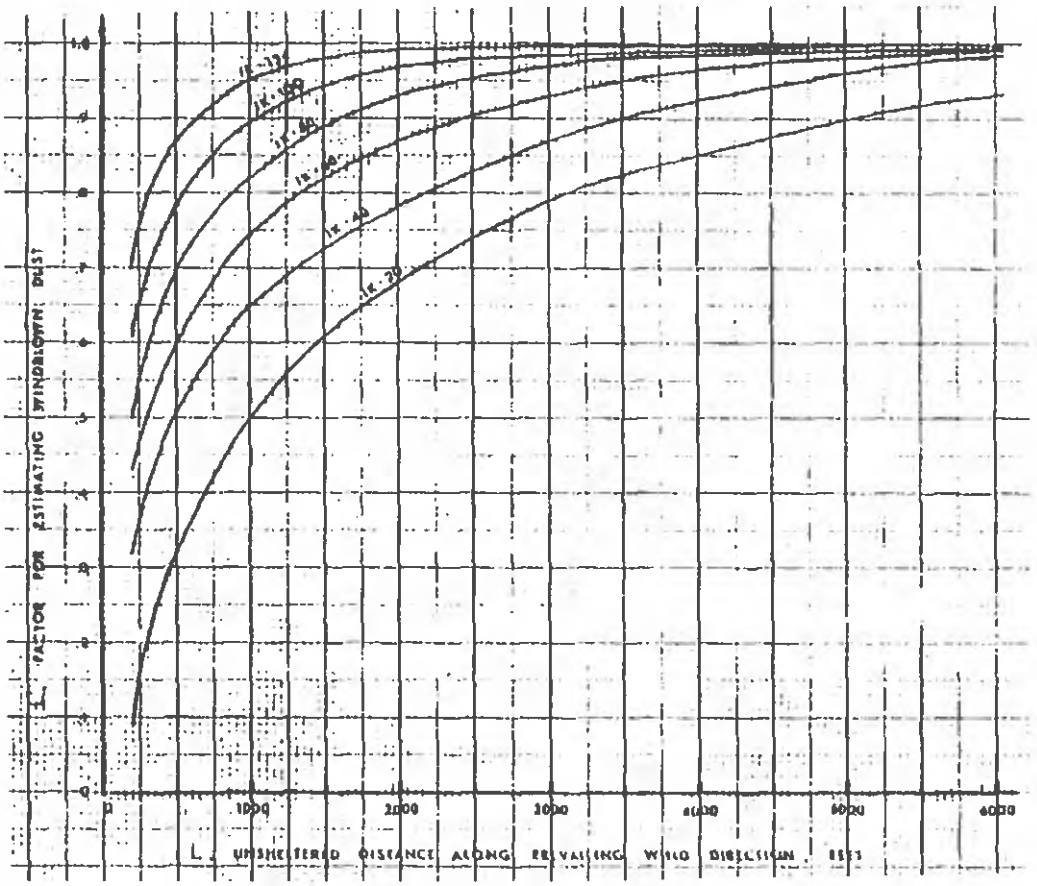

Figure 7-4. Effect of Field Length on Relative Soil Erosion Rate[6]

Vegetative Cover Factor, V'. Vegetative cover on agricultural fields during periods other than the primary crop season greatly reduces wind erosion of the soil. This cover most commonly is crop residue, either standing stubble or mulched into the soil. The effect of various amounts of residue, V, in reducing erosion is shown qualitatively in Figure 7-5, where IKCL' is the potential annual soil loss (in tons/acre-year) from a bare field, and V' is the fractional amount of this potential loss which results when the field has a vegetative cover of V (in lb of air-dried residue/acre). The amount of vegetative cover on a single field can be ascertained by collecting and weighing clean residue from a representative plot or by visual comparison with calibrated photographs. The vegetative soil cover factor, V', is especially problematic for California, and was completely replaced by a series of factors in the ARBWEQ (see analysis below). This factor assumes a certain degree of cover year round based upon post harvest soil cover, and does not account for barren fields from land preparation, growing canopy cover, or replanting of crops during a single annual cycle. All of these factors are very important in the estimation of windblown agricultural dust emissions. Therefore, CARB staff replaced the vegetative soil cover factor, V', with separate crop canopy cover, post harvest soil cover, and post harvest replant factors.

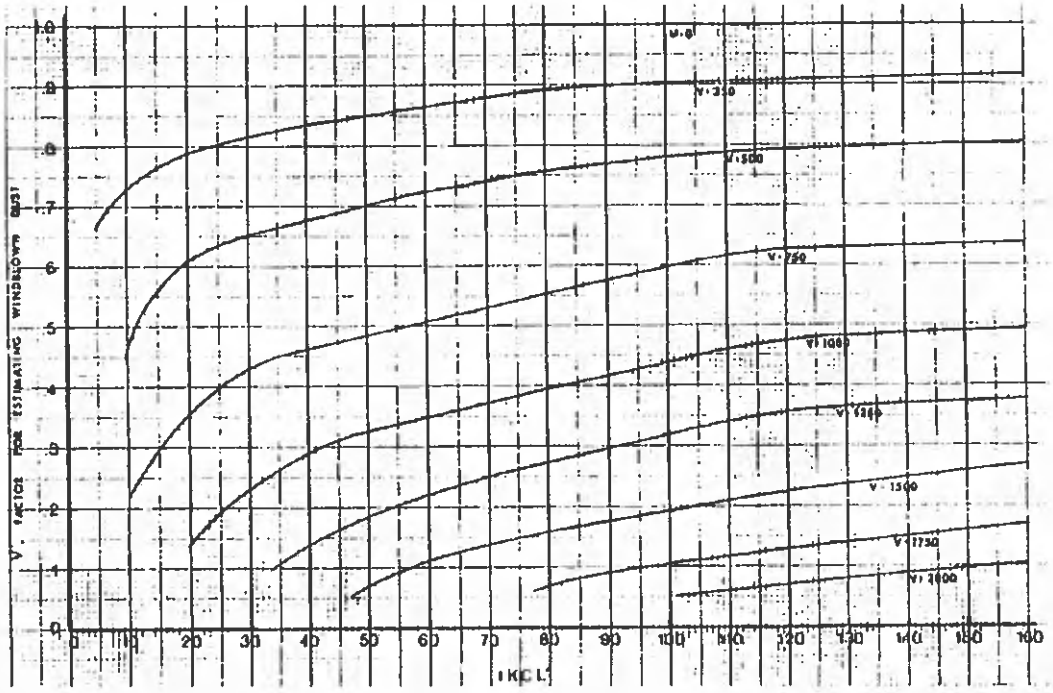

Figure 7-5. Effect of Vegetative Cover on Relative Emission Rate[6]

7.2.2 Climate-Based Improvements in the ARBWEQ

The calculation of the climatic factor C requires mean monthly temperature, monthly rainfall, and mean annual wind speed for a given location as data inputs. This factor is used to estimate climatic effects on an annual basis. In order to make estimates of emissions using the ARBWEQ that are specific to different seasons, it is necessary to estimate the climatic factor that would apply to each season. The changes to the agricultural windblown emissions inventory discussed here, include modifications to both the annual and the monthly climatic factor profile determination methodology included in the ARBWEQ.

The Annual Climatic Factor for the ARBWEQ. Reference 6 includes a definition of the climatic factor that agrees with the method utilized by the NRCS.[13] It incorporates the monthly precipitation effectiveness derived from precipitation and temperature, along with monthly average wind speeds. Garden City, Kansas is assigned a factor of 1.0 and the climatic factors for all other sites are adjusted from this value.

The Monthly Climatic Factor for the ARBWEQ. There are several ways to create a climate-based monthly profile for the ARBWEQ. Because the ARBWEQ is an annual emission estimation model, CARB staff did not directly estimate monthly emissions using the monthly climatic factor. Instead, the annual climatic factor was used to determine annual emissions, and then the monthly-normalized climatic factors were multiplied by the annual emissions. This helped to limit the effect of extreme monthly values on the annual emissions estimate. CARB staff devised a method termed the "month-as-a-year" method which produced climatic factors that would apply if the

climate for a given month were instead the year round climate. These monthly numbers, once normalized, provided the climate-based temporal profile. The improvements arising from the use of the month-as-a-year method are due to the fact that it relies on temperature, and precipitation inputs, in addition to wind. The ARBWEQ further modified the temporal profile calculation, by also adding nonclimate-based temporal factors. The month-as-a-year method in the ARBWEQ produces pronounced curves with small climatic factors (resulting in lower emissions) in the cool, wet and more stagnant periods, and large climatic factors (and higher emissions) in the hot, dry, and windy periods. The U.S. EPA method yields gentler profiles, which are shifted into the cooler and wetter months from the ARBWEQ profiles. The 1989 CARB methodology established one erosive wind energy distribution statewide. This resulted in an unrealistic, nearly flat distribution, with very little seasonality. Therefore, the ARBWEQ month-as-a-year method provides a more realistic picture of the windblown dust temporal profile (see Reference 3 for comparison curves and supporting references).

7.2.3 Nonclimate-Based Improvements in the ARBWEQ

Among the nonclimate-based factors that influence windblown agricultural emissions are soil type, soil structure, field geometry, proximity to wind obstacles, crop, soil cover by crop canopy or post harvest vegetative material, irrigation, and replanting of the post harvest fallow land with a different crop. CARB has attempted to correct many of these limitations in the ARBWEQ. Many of the corrections are temporally based and rely upon the establishment of accurate crop calendars to reflect field conditions throughout the year. The long-term irrigation-based adjustment to erodibility, due to soil cloddiness, is not temporally based, and is therefore applied for the entire year.[12] The change in erodibility varies based on soil type, but often results in a reduction in the tons per acre value for irrigated crops of about one-third.

Crop Calendars: Quantifying Temporal Effects. Factors such as crop canopy cover, post harvest soil cover, irrigation, and replanting to another crop have a major effect on windblown emissions. Estimating the effects of these factors requires establishing accurate crop calendars. The planting and harvesting dates are principal components of the crop calendar. The list of references consulted to establish the planting and harvesting dates is included in Reference 3.

Each planting month for a given crop was viewed by CARB staff as a separate cohort (maturation class). Since a single planting cohort may be harvested in several months, each cohort was split into cohort-plant/harvest date pairs. The cohort-plant/harvest date pairs were then assigned based upon a first-in-first-out ordering. The fraction of the total annual crop assigned to a given cohort-plant/harvest date pair was derived by multiplying the fraction of the total annual crop planted in a given month (cohort) by the fraction of the cohort harvested in a given month. The fraction of a cohort-plant/harvest date pair that has been planted, but not harvested at any given time, is termed the growing canopy fraction, or GCF (although the canopy may or may not actually be increasing at any given time). The growing canopy fraction determines the fraction of the acreage that will have the crop canopy factor applied to its emission calculations. The acreage that is not assigned to the growing canopy fraction is the postharvest/preplant (PHPP) acreage. The PHPP acreage will have the post harvest soil

cover, and replanting to a different crop factors applied when calculating its emissions. The effect of using cohort-plant/harvest date pairs is to blend the crop canopy, soil cover, replanting, and irrigation effects over both the planting and harvesting periods. This approach provides a more realistic estimate of the temporal windblown emissions profile during these periods. All of the monthly factor profile adjustments described below are calculated for each month of the year, for each cohort-harvest/plant date pair, for each crop, for each county.

Adding a Short-Term Irrigation Factor for Wetness. This adjustment takes into account the overall soil texture, number of irrigation events, and fraction of wet days during the time period[12] (one month for the purposes of the CARB inventory). The list of references consulted to establish the irrigation profiles is included in Reference 3. The irrigation factor for months in which irrigations take place will typically be greater than 0.80. In other words, the irrigations will result in a reduction in erodibility of less than 20%. This is only an estimate for a typical case during the growing season. When averaged over the year, the overall reduction in erodibility is lower.

Replacement Factors to Address Problems with the Vegetative Soil Cover Factor in the WEQ. According to CARB, there are many problems with the vegetative soil cover factor, V. For example, this factor is applied to the acreage year round, even during the growing season, and ignores the effect of disk-down and other land preparation operations on post harvest vegetative soil cover. The factor also does not account for canopy cover during the growing season. In addition, the WEQ was derived based on agricultural practices typical of the Midwestern United States. Crops such as alfalfa have full canopy cover for nearly the entire year. There is also a large amount of acreage that is used for more than one crop per year, and there was no provision in the vegetative soil cover factor for estimating the effects on emissions of this replanting. Whether the land is to be immediately replanted to a different crop, or is going to remain fallow until the next planting of the same crop, it is common practice to disk under the harvested crop within a month or two of harvest. The vegetative soil cover factor for the most part assumes that the post harvest debris remains undisturbed. References to support this agricultural practice are included in Reference 3. CARB staff replaced the vegetative soil cover factor in the ARBWEQ with the three adjustments discussed below to approximate the effects on windblown agricultural PM emissions of: (a) crop canopy cover during the growing season; (b) changes to post harvest soil cover; and (c) post harvest planting of a different crop on the harvested acreage.

Crop Canopy Factor. Crop canopy cover is the fraction of ground covered by crop canopy when viewed directly from above. USDA-ARS staff provided CARB with methodology from the RWEQ for estimating the effects of crop canopy cover on windblown dust emissions.[8] The soil loss ratio (SLRcc) is defined as the ratio of the soil loss for a soil of a given canopy cover divided by the soil loss from bare soil. SLRcc is the factor that is multiplied by the erodibility to adjust the erodibility for canopy cover. The greater the canopy cover, the smaller the SLRcc, and the greater the reduction in erodibility. SLRcc defines an exponential curve that demonstrates major differences in the erodibility reduction for the range of zero to 30 percent canopy cover (typically achieved within a few months after planting). Thereafter, reductions occur much more

slowly, and eventually the curve flattens out. This results in a rapid decrease in emissions during the first few months following planting, until the emissions are only a very small fraction of the bare soil emissions. The canopy cover then will remain, and the windblown emissions will consequently stay very low until harvest. Senescence effects (late growing season reduction in canopy) have been excluded from this model, and the rationale for that exclusion is discussed in Reference 3.

Post Harvest Soil Cover Factor. Post harvest soil cover is the fraction of ground covered by vegetative debris when viewed directly from above. USDA-ARS staff provided CARB with methodology from the RWEQ for estimating the effects of post harvest soil cover on windblown dust emissions.[8] The soil loss ratio (SLRsc) is defined as the ratio of the soil loss for a soil of a given soil cover divided by the soil loss from bare soil. SLRsc is the factor that is multiplied by the erodibility to adjust the erodibility for post harvest soil cover. The greater the post harvest soil cover, the smaller the SLRsc, and the greater the reduction in erodibility. The list of references consulted to establish the post harvest soil cover profiles is included in Reference 3.

Post Harvest "Replant-to-Different-Crop" Factor. As discussed above, the vegetative soil cover factor does not include any adjustments for harvested acreages that are quickly replanted to a different crop. This multiple cropping is very common in California, and has been accounted for in this methodology by removing from the inventory calculation the fraction of the harvested acreage that is replanted, at the estimated time of replanting. This removed fraction is based on information provided by agricultural authorities (see reference list in Reference 3). The net result of the application of the fraction is that the post disk-down acreage (one to two months after harvest), and resultant emissions, is reduced by the fraction of harvested acreage converted to a new crop.

Bare and Border Soil Adjustments. Most fields will have some cultivated areas that are barren. These bare areas could be due to uneven ground (e.g., water accumulation), uneven irrigation, pest damage, soil salinity, etc. Most fields will have some type of border. In some cases there is a large barren border, in other cases it is overgrown with vegetation. Many border areas are relatively unprotected, and prone to wind erosion. CARB staff established approximate fractions of cultivated acreage that would be barren and border areas, respectively. These barren and border acreage adjustments result in emission increases disproportionate to the acreage involved. The reason that the bare acreage-based increase is so large is that the bare acreage does not have either a crop canopy or post harvest soil cover factor applied. The same reasons apply to the border adjustment, but the border region is also assumed not to be irrigated. Therefore, no irrigation factor (wetness), and no long-term irrigation adjustment to erodibility (cloddiness) are applied. No border adjustment was applied to the pasture acreage, since pasture areas frequently lack a barren border.

Temporal Activity. For the 1989 CARB methodology, the temporal profile was based on an estimated statewide erosive wind energy profile. The profile, implemented in the ARBWEQ included wind, precipitation and temperature climatic effects, along with the addition of the effects of crop canopy, postharvest soil cover, postharvest replanting to a different crop, and irrigation. In addition, the inclusion of bare ground and

field border effects also adjusted the profile in the ARBWEQ. The profile produced for the ARBWEQ is no longer a separate profile applied to annual emissions, but is now an intermediate output produced during the estimation of annual emissions.

7.3 Demonstrated Control Techniques

The emission potential of agricultural wind erosion is affected by the degree to which soil management and cropping systems provide adequate protection to the exposed soil surface during exposure periods. Table 7-3 presents a summary of demonstrated control measures and the associated PM10 control efficiencies. It is readily observed that reported control efficiencies for many of the control measures are highly variable. This may reflect differences in the operations as well as the test methods used to determine control efficiencies.

Table 7-3. Control Efficiencies for Control Measures for Agricultural Wind Erosion [1, 15-18]

Control measure	PM10 Control Efficiency	References/comments
Artificial wind barrier	64-88%	MRI, 1992. Assumes a 50% porosity fence.
	54-71%	Grantz et al, 1998. Control efficiency is for a wind fence.
	4-32%	Bilbro and Stout, 1999. Control efficiency based upon reduction in wind velocity by a wind fence made from plastic pipe with a range of optical density of from 12% to 75%.
Cover crop	90%	Washington State Univ., 1998.
Cross-wind ridges	24-93%	Grantz et al, 1998. Control efficiency is for furrows.
	40-80%	Washington State Univ., 1998.
Mulching	20-40%	Washington State Univ., 1998. Control efficiency is for straw.
Trees or shrubs planted as a windbreak	25%	Sierra Research, 1997. Control efficiency is for trees.

7.4 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. Regulatory formats specify the threshold source size that triggers the need for control application. Example regulatory formats for several local air quality agencies in the WRAP region are presented in Table 7-4. The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: www.maricopa.gov/envsvc/air/ruledesc.asp

(Note: The Clark County website did not include regulatory language specific to agricultural wind erosion at the time this chapter was written.)

Table 7-4. Example Regulatory Formats for Agricultural Wind Erosion

Control measure	Goal	Threshold	Agency
Requires producers to draft and implement fugitive dust plan with approved control methods	Limits fugitive dust from agricultural sources		SJVAPCD Rule 8081 11/15/2001
Exemption from Rule 403 general requirements.	Limit PM10 Levels to 50 $\mu g/m^3$	Voluntary implementation of district approved conservation practices and complete/maintain self-monitoring plan	SCAQMD Rule 403 12/11/1998
Requires dust plan that contains procedures assuring moisture factor between 20%-40% for manure in top 3" of occupied pens and outlines manure management practices and removal	Reduce fugitive dust from livestock feed yards		ICAPCD Rule 420 8/13/2002
Dust suppressants, gravel, install shrubs/trees	Limit fugitive dust plume to 20% opacity	Commercial feedlot/livestock area; shrubs/trees 50ft-100ft from animal pens; compliance with stabilization limitation	Maricopa County Rule 310.01 02/16/2000
Record keeping for all ctrl measure taken	Ensure that appropriate ctrl measures are implemented and maintained	All ops subject to Rule 310.01, provided within 48 hrs of ctrl officer request	Maricopa County Rule 310.01 02/16/2000

7.5 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations. An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Table 7-5summarizes the compliance tools that are applicable to agricultural wind erosion.

Table 7-5. Compliance Tools for Agricultural Wind Erosion

Record keeping	Site inspection/monitoring
Land condition by date (e.g., vegetation; furrowing of fallow land; soil crusts), including residue management and percentages; meteorological log; establishment/ maintenance of windbreaks.	Observation of land condition (crusts, furrows), especially during period of high winds.

7.6 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for fugitive dust originating from agricultural wind erosion. A sample cost-effectiveness calculation is presented below for a specific control measure (adding a straw mulch to the field) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous

control measure for agricultural wind erosion, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Agricultural Wind Erosion

Step 1. Determine source activity and control application parameters.

Field size (acres)	320
Control Measure	1,000 lb mulch per acre
Control application/frequency	Once post-harvesting
Control Efficiency	30%

The field size is an assumed value, for illustrative purposes. Adding a straw mulch to the field at a rate of 1,000 lbs per acre has been chosen as the applied control measure. The control application/frequency and control efficiency are default values provided by WSU, 1998.

Step 2. Calculate Pm10 Emission Factor. The PM10 emission factor is calculated from AP-42 equation utilizing the appropriate correction parameters:

E (tons/acre-year) = 0.5 A I K C L' V'

A	0.025
I – soil erodibility (tons/acre-year)	86
K- surface roughness factor	0.50
Climatic factor	0.33
Unsheltered field width factor	0.70
Vegetative cover factor	0.25

E = 0.031 tons/acre-year

[Note: the correction parameters above were selected for illustrative purposes.]

Step 3. Calculate Uncontrolled PM Emissions. The PM10 emission factor (given in Step 2) is multiplied by the field size (under activity data) to compute the annual PM10 emissions in tons per year, as follows:

Annual emissions = (Emission Factor x Field Size)
Annual PM10 emissions = (0.031 x 320) = 9.9 tons

Annual PM2.5 emissions = 0.15 x PM10 emissions[7] = 0.15 x 9.9 tons = 1.5 tons

Step 4. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) are equal to the uncontrolled emissions (calculated above in Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency).

For this example, we have selected conservation tilling as our control measure. Based on a control efficiency estimate of 30%, the annual controlled emissions are calculated to be:

Annual Controlled PM10 emissions = (9.9 tons) x (1 – 0.3) = 6.9 tons
Annual Controlled PM2.5 emissions = (1.5 tons) x (1 – 0.3) = 1.0 tons

Step 5. Determine Annual Cost to Control PM Emissions.

The Annual Cost of mulching is calculated by multiplying the number of acres by the cost per acre. The cost of mulching is assigned a value of $40 per acre.[17] Thus, the Annual Cost is estimated to be: 320 x 40 = $12,800

Step 6. Calculate Cost-effectiveness. Cost-effectiveness is calculated by dividing the annual cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions:

Cost-effectiveness = Annual Cost/ (Uncontrolled emissions – Controlled emissions)

Cost-effectiveness for PM10 emissions = $12,800 / (9.9 – 6.9) = $4,295/ton
Cost-effectiveness for PM2.5 emissions = $12,800 / (1.5 – 1.0) = $28,636/ton

7.7 References

1. MRI, 1992. *Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.* U.S. EPA, Research Triangle Park, NC, September.

2. CARB, 1997. *Windblown Dust - Agricultural Lands*, Section 7.12 in Methods for Assessing Area Source Emissions, California Air Resources Board, Sacramento, CA.

3. Francis, S.R., 1997. *Supplemental Documentation for Section 7.12, Windblown Dust - Agricultural Lands, Stationary Source Inventory Methodology*, California Air Resources Board, Sacramento, CA. (This document contains the complete reference list for the development of the Section 7.12 methodology.)

4. Woodruff, N.P., Siddoway, F.H., 1965. *A Wind Erosion Equation*, Soil Sci. Am. Proc., Vol. 29(5): 602-608.

5. Skidmore, E.L., Woodruff, N.P., 1968. *Wind Erosion Forces in the United States and Their Use in Predicting Soil Loss*, Agriculture Handbook No. 346, U.S. Department of Agriculture, Agricultural Research Service.

6. USEPA, 1974. *Development of Emission Factors for Fugitive Dust Sources*, EPA 450/3-74-037, U.S. EPA, Research Triangle Park, NC, June. Updated in September 1988 in *Control of Open Fugitive Dust Sources, EPA-450/3-88-008.*

7. MRI, 2006. Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Emission Factors, prepared for the WRAP by Midwest Research Institute, Project No. 110397, February 1.

8. Fryrear, D. et al, 1996. *Revised Wind Erosion Equation*, U.S. Department of Agriculture, Agricultural Research Service, Big Spring, TX, August.

9. Hagen, L.J. et al, 1995. *Wind Erosion Prediction System*, U.S. Department of Agriculture, Agricultural Research Service, Manhattan, KS, September.

10. Generalized Soil Map of CA, University of California, Division of Agricultural Sciences, Agricultural Sciences Publications, Richmond, CA, May 1980.

11. State Geographic Data Base, U.S. Department of Agriculture, Natural Resources Conservation Service, September 1995.

12. Hagen, Lawrence. Personal communication to Krista Eley of ARB staff, U.S. Department of Agriculture, Agricultural Research Service, Manhattan, KS, September 25, 1995.

13. Bunter, Walter. Personal communication to Steve Francis, State Agronomist, U.S. Department of Agriculture, Natural Resources Conservation Service, Davis, CA, February 20, 1996.

14. CARB, 1997. *Windblown Dust – Unpaved Roads*, Section 7.13 in Methods for Assessing Area Source Emissions, California Air Resources Board, Sacramento, CA.

15. Bilbro, J. D., Stout, J. E., 1999. Journal of Soil and Water Conservation.

16 Grantz, D. A., Vaughn, D. L., Farber, R. J., Kim, B., VanCuren, T., Campbell, D, Zink, T., 1998. California Agriculture, Volume 52, July-August.

17. Washington State University, 1998. *Farming with the Wind*, College of Agriculture and Home Economics Miscellaneous Publication No. MISC0208, December.

18. Sierra Research, 1997. *Particulate Control Measure Feasibility Study,* Volume I and Volume II (Appendices), prepared for Maricopa Association of Government by Sierra Research, Inc., Sacramento, CA. January 24.

Chapter 8. Open Area Wind Erosion

8.1 Characterization of Source Emissions 8-1
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8.1 Characterization of Source Emissions

Dust emissions may be generated by wind erosion of open areas of exposed soils or other aggregate materials within an industrial facility. These sources typically are characterized by nonhomogeneous surfaces impregnated with nonerodible elements (particles larger than approximately 1 centimeter [cm] in diameter). Field testing of coal piles and other exposed materials using a portable wind tunnel has shown that: (a) threshold wind speeds exceed 5 meters per second (m/s) (11 miles per hour [mph]) at 15 cm above the surface or 10 m/s (22 mph) at 7 m above the surface, and (b) particulate emission rates tend to decay rapidly (half-life of a few minutes) during an erosion event. In other words, these aggregate material surfaces are characterized by finite availability of erodible material (mass/area) referred to as the erosion potential. Any natural crusting of the surface binds the erodible material, thereby reducing the erosion potential. Loose soils or other aggregate materials consisting of sand-sized materials act as an unlimited reservoir of erodible material and can sustain emissions for periods of hours without substantial decreases in emission rates.

If typical values for threshold wind speed at 15 cm are corrected to typical wind sensor height (7 to 10 m), the resulting values exceed the upper extremes of hourly mean wind speeds observed in most areas of the country. In other words, mean atmospheric wind speeds are not sufficient to sustain wind erosion from flat surfaces of the type tested. However, wind gusts may quickly deplete a substantial portion of the erosion potential. Because erosion potential has been found to increase rapidly with increasing wind speed, estimated emissions should be related to the gusts of highest magnitude. The routinely measured meteorological variable that best reflects the magnitude of wind gusts is the fastest mile. This quantity represents the wind speed corresponding to the whole mile of wind movement that has passed by the 1-mile contact anemometer in the least amount of time. Daily measurements of the fastest mile are presented in the monthly Local Climatological Data (LCD) summaries. The duration of the fastest mile, typically about 2 minutes (for a fastest mile of 30 mph), matches well with the half-life of the erosion process, which ranges between 1 and 4 minutes. It should be noted, however, that peak winds can significantly exceed the daily fastest mile.

The wind speed profile in the surface boundary layer is found to follow a logarithmic distribution as follows:

$$u(z) = \frac{u^*}{0.4} \ln \frac{z}{z_0} \quad (z>z_0) \tag{1}$$

where,

- u = wind speed (cm/s)
- u^* = friction velocity (cm/s)
- z = height above test surface (cm)
- z_0 = roughness height (cm)
- 0.4 = von Karman's constant (dimensionless)

The friction velocity (u^*) is a measure of wind shear stress on the erodible surface, as determined from the slope of the logarithmic velocity profile. The roughness height (z_0) is a measure of the roughness of the exposed surface as determined from the y-intercept

of the velocity profile, i.e., the height at which the wind speed is zero. These parameters are illustrated in Figure 8-1 for a roughness height of 0.1 cm.

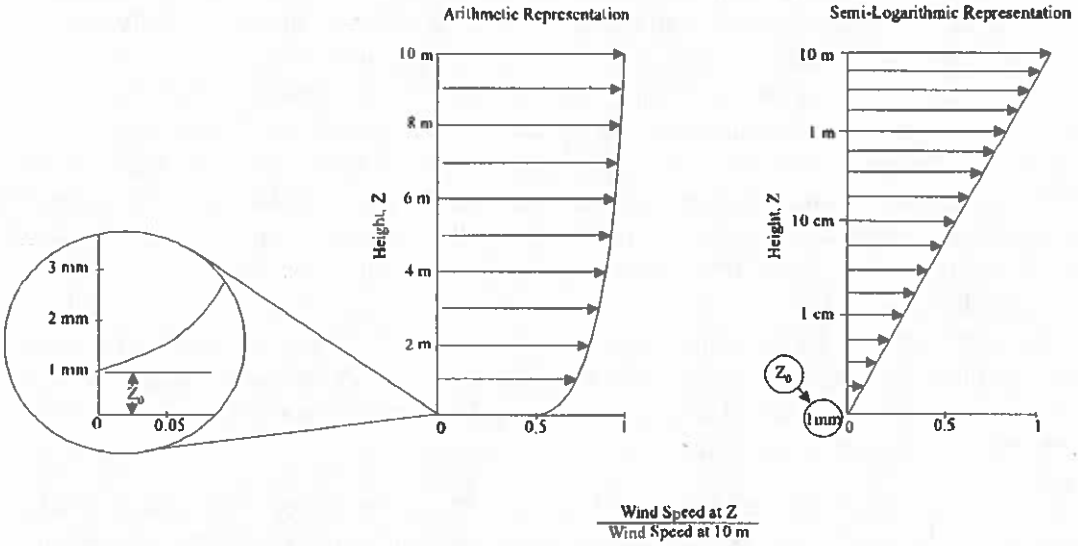

Figure 8-1. Illustration of Logarithmic Wind Velocity Profile

Emissions generated by wind erosion are also dependent on the frequency of disturbance of the erodible surface because each time that a surface is disturbed, its erosion potential is restored. A disturbance is defined as an action that results in the exposure of fresh surface material. On a storage pile, this would occur whenever aggregate material is either added to or removed from the old surface. A disturbance of an exposed area may also result from the turning of surface material to a depth exceeding the size of the largest pieces of material present.

8.2 Emission Estimation: Primary Methodology[1-11]

This section was adapted from Section 13.2.5 of EPA's *Compilation of Air Pollutant Emission Factors (AP-42)*. Section 13.2.5 was last updated in January 1995.

The PM10 emission factor for wind-generated particulate emissions from mixtures of erodible and nonerodible surface material subject to disturbance may be expressed in units of grams per square meter (g/m^2) per year as follows:

$$\text{PM10 Emission Factor} = 0.5 \sum_{i=1}^{N} P_i \qquad (2)$$

where,

N = number of disturbances per year

Pi = erosion potential corresponding to the observed (or probable) fastest mile of wind for the ith period between disturbances (g/m^2)

In calculating emission factors, each area of an erodible surface that is subject to a different frequency of disturbance should be treated separately. For a surface disturbed

daily, N = 365 per year, and for a surface disturbance once every 6 months, N = 2 per year. The erosion potential function for a dry, exposed surface is given as:

$$P = 58\,(u^* - u_t^*)^2 + 25\,(u^* - u_t^*) \qquad (3)$$

$$P = 0 \text{ for } u^* \le u_t^*$$

where,

u^* = friction velocity (m/s)

u_t = threshold friction velocity (m/s)

Because of the nonlinear form of the erosion potential function, each erosion event must be treated separately. The PM2.5/PM10 ratio for windblown fugitive dust posted on EPA's CHIEF website is 0.15. This ratio is based on the analysis conducted by MRI on behalf of WRAP.[11]

Equations 2 and 3 apply only to dry, exposed materials with limited erosion potential. The resulting calculation is valid only for a time period as long or longer than the period between disturbances. Calculated emissions represent intermittent events and should not be input directly into dispersion models that assume steady-state emission rates. For uncrusted surfaces, the threshold friction velocity is best estimated from the dry aggregate structure of the soil. A simple hand sieving test of surface soil can be used to determine the mode of the surface aggregate size distribution by inspection of relative sieve catch amounts, following the procedure described below.

FIELD PROCEDURE FOR DETERMINING THRESHOLD FRICTION VELOCITY
(from a 1952 laboratory procedure published by W. S. Chepil[5])

Step 1. Prepare a nest of sieves with the following openings: 4 mm, 2 mm, 1 mm, 0.5 mm, and 0.25 mm. Place a collector pan below the bottom (0.25 mm) sieve.

Step 2. Collect a sample representing the surface layer of loose particles (approximately 1 cm in depth, for an encrusted surface), removing any rocks larger than about 1 cm in average physical diameter. The area to be sampled should be not less than 30 cm by 30 cm.

Step 3. Pour the sample into the top sieve (4-mm opening), and place a lid on the top.

Step 4. Move the covered sieve/pan unit by hand, using a broad circular arm motion in the horizontal plane. Complete 20 circular movements at a speed just necessary to achieve some relative horizontal motion between the sieve and the particles.

Step 5. Inspect the relative quantities of catch within each sieve, and determine where the mode in the aggregate size distribution lies, i.e., between the opening size of the sieve with the largest catch and the opening size of the next largest sieve.

Step 6. Determine the threshold friction velocity from Table 8-1.

The results of the sieving can be interpreted using Table 8-1. Alternatively, the threshold friction velocity for erosion can be determined from the mode of the aggregate size distribution using the graphical relationship described by Gillette.[5, 6] If the surface material contains nonerodible elements that are too large to include in the sieving (i.e., greater than about 1 cm in diameter), the effect of the elements must be taken into account by increasing the threshold friction velocity.[10]

Table 8-1 Field Procedure for Determination of Threshold Friction Velocity (Metric Units)

Tyler Sieve No.	Opening (mm)	Midpoint (mm)	u_t^* (cm/s)
5	4		
9	2	3	100
16	1	1.5	76
32	0.5	0.75	58
60	0.25	0.375	43

Threshold friction velocities for several surface types have been determined by field measurements with a portable wind tunnel. These values are presented in Table 8-2.

Table 8-2. Threshold Friction Velocities (Metric Units)

Material	Threshold friction velocity (m/s)	Roughness height (cm)	Threshold wind velocity at 10 m (m/s)	
			z_o = Actual	z_o = 0.5 cm
Overburden[a]	1.02	0.3	21	19
Scoria (roadbed material)[a]	1.33	0.3	27	25
Ground coal (surrounding coal pile)[a]	0.55	0.01	16	10
Uncrusted coal pile[a]	1.12	0.3	23	21
Scraper tracks on coal pile[a,b]	0.62	0.06	15	12
Fine coal dust on concrete pad[c]	0.54	0.2	11	10

[a] Western surface coal mine; reference 2.
[b] Lightly crusted.
[c] Eastern power plant; reference 3.

The fastest mile of wind for the periods between disturbances may be obtained from the monthly local climatological data (LCD) summaries for the nearest reporting weather station that is representative of the site in question.[7] These summaries report actual fastest mile values for each day of a given month. Because the erosion potential is a highly nonlinear function of the fastest mile, mean values of the fastest mile are inappropriate. The anemometer heights of reporting weather stations are found in Reference 8, and should be corrected to a 10-m reference height using Equation 1. To convert the fastest mile of wind (u^+) from a reference anemometer height of 10 m to the equivalent friction velocity (u^*), the logarithmic wind speed profile may be used to yield the following equation:

$$u^* = 0.053\, u_{10}^+ \qquad (4)$$

where,

u^* = friction velocity (m/s)
u_{10}^+ = fastest mile of reference anemometer for period between disturbances (m/s)

This assumes a typical roughness height of 0.5 cm for open terrain. Equation 4 is restricted to large relatively flat exposed areas with little penetration into the surface wind layer.

8.3 Emission Estimation: Alternate Methodology

Duane Ono with the Great Basin Unified APCD and Dale Gillette developed a method called the Dust ID method to measure fugitive PM10 dust emissions due to wind erosion that has been approved for use in PM10 SIPs.[12, 13] This method has been applied to the dry lake bed at Owens Lake, CA using an extensive sand flux monitoring network. Owens Lake is the largest single source of fugitive dust in the United States (estimated to be ~80,000 tons PM10/year). The network consisted of co-located electronic Sensits and passive Cox Sand Catchers (CSCs) deployed on a 1 km x 1 km grid covering 135 square kilometers of the lake bed with their sensor or inlet positioned 15 cm above the surface. Sensits measure the kinetic energy or the particle counts of sand-sized particles as they saltate across the surface. Due to differences in the electronic response of individual Sensits, these units had to be co-located with passive sand flux measurement devices to calibrate their electronic output and to determine the hourly sand flux. The battery powered Sensits were augmented with a solar charging system. A data logger recorded hourly Sensit data during inactive periods and switched to 5-minute data during active erosion periods. CSC's are passive instruments that are used to collect sand-sized particles that are blown across the surface during a dust event. These instruments were designed and built by the Great Basin Unified Air Pollution Control District as a reliable, low-cost instrument that could withstand the harsh conditions at Owens Lake. CSC's have no moving parts and can collect sand for a month at Owens Lake without overloading the collector. As an alternative to hourly sand (saltation) flux measurements relying on Sensits, Ono[14] found that monthly sand flux measurements obtained with CSCs could be applied to a model developed by Gillette et al.[15] to provide a good estimate of hourly sand flux rates.

Hourly PM10 emissions from each square kilometer of the lake bed were estimated from the following equation:

$$F_a = K_f \times q$$

where, F_a = PM10 emissions flux ($g/cm^2/hr$)
q = hourly sand flux ($g/cm^2/hr$) measured at 15 cm above the surface
K_f, called the K-factor, = proportionality factor relating the PM10 emissions flux to the sand flux measured at 15 cm above the surface.

K_f values were determined by comparing CALPUFF model predictions, based on meteorological data from thirteen 10-meter towers and an Upper Air Wind Profiler to generate wind fields using the CALMET model, to observed hourly PM10 concentrations measured at six PM10 monitoring sites utilizing TEOM PM10 monitors. A K-factor of 5×10^{-5} was used to initially run the model and to generate PM10 concentration values that were close to the monitored concentrations. Hourly K-factor values were later adjusted in a post-processing step to determine the K-factor value that would have made the modeled concentration match the monitored concentration at each of the six PM10 monitor sites using the following equation:

$$K_f = K_i [(C_{obs} - C_{bac})/C_{mod}]$$

where, K_i = initial K-factor (5×10^{-5})
$C_{obs.}$ = observed hourly PM10 concentration ($\mu g/m^3$)
$C_{bac.}$ = background PM10 concentration (assumed to be 20 $\mu g/m^3$)
$C_{mod.}$ = model-predicted hourly PM10 concentration ($\mu g/m^3$)

The results showed that K_f changed spatially and temporally at Owens Lake and that the changes corresponded to different soil textures on the lake bed and to seasonal surface changes that affected erodibility. The results also showed that some source areas were active all year, while others were seasonal and sometimes sporadic. Wind tunnel tests at Owens Lake independently confirmed these seasonal and spatial changes in K_f. Ono et al.[12] concluded that the emission estimates using their Dust ID method were more accurate than the AP-42 method for estimating daily emissions, since the emissions estimates correspond to measured hourly wind erosion on the lake bed. For daily emissions, Ono and co-workers believe that AP-42 drastically overestimates the emissions at low wind speed conditions, and underestimates emissions at high wind speeds. This large discrepancy in the emission estimates is due to the use of a single threshold friction velocity for the entire erosion area in the AP-42 method. The AP-42 method and the Dust ID method of estimating emissions resulted in very close agreement for the annual emissions.

8.4 Emission Estimation: Other Methodologies

Several alternative emission estimation methods for open area wind erosion have been developed that are still in the developmental stage and have not yet been approved by federal or state agencies. Thus, the reader is cautioned in the use of these methods.

8.4.1 MacDougall Method

MacDougall developed a method for estimating fugitive dust emissions from wind erosion of vacant land.[16] This method, which relies heavily on emission factors developed for different vacant land parcels using wind tunnels. The availability of wind tunnel results for the types of vacant land being assessed must be considered when deciding to use this method for other applications. It should be pointed out that in 2003 Environ (under contract to the Western Governors' Association) abandoned this approach due to the paucity of sufficient wind tunnel data for many different vacant land parcels in the western U.S.[17] Also, the WRAP's fugitive dust expert panel had major reservations regarding the MacDougall method.[18] Panel members were skeptical about using the proposed methodology since wind tunnels have shortcomings and do not represent actual conditions in nature. The panel concluded that determining emission factors in the manner proposed will result in significant underestimation of windblown dust for those cases where saltation plays a role. The six steps described in the MacDougall method are summarized below.

Step 1: Categorizing Vacant Land. Vacant land within the study area must be categorized based upon the potential of the parcels to emit fugitive dust during wind

events. Many wind tunnel studies have been conducted in the western United States, and the vacant land descriptions of the wind tunnel test areas should be used to categorize the vacant land within the study area. When categorizing vacant land, it is especially important whether the land has vegetation, rocks or other sheltering elements, whether the soil crust is intact or disturbed, and whether there are periodic activities on the vacant land such as vehicles or plowing that will change the land from fairly stable to unstable. Not every parcel of vacant land will necessarily fit into a category that has been wind tunnel tested. For parcels without a specific vacant land type wind tunnel test, assumptions will need to be made of the best representative land type and uncertainties noted.

Step 2: Identify Wind Tunnel Emission Factors. Based upon the vacant land categorization, wind tunnel results should be reviewed and applied appropriately to each category of vacant land. Wind tunnel results should be reviewed to determine if "spikes" from the initial portion of the test are presented separately or averaged into an hourly factor. Whenever possible, spikes should not be included in an hourly factor. The spike values should be included only at the beginning of each wind event.

Step 3: Develop Meteorological Data Set. For the area to be studied, hourly average wind speeds, rainfall, and if available peak wind gust data should be gathered. If a study area is particularly large, several different meteorological data sets may need to be gathered, and each land parcel matched with the meteorological data that impacts that parcel.

Step 4: Determine Land Type Reservoirs, Threshold Wind Velocities, Wind Events, and Rainfall Events. Based upon the wind tunnel results for each vacant land type, the wind speed when emissions were first measured for the vacant land type, should be set as the threshold wind speed. Most vacant land does not have an endless reservoir of fugitive dust; however, land that has a high degree of disturbance will continue to emit throughout a wind event. Therefore, for each vacant land type, the wind tunnel results should be reviewed and a determination made on the length of time the parcel will emit for a give wind event. It is recommended that an assumption be made that parcels with sheltering clements, vegetated parcels, or parcels with a soil crust will only emit during the first hour of a wind event. Parcels with a relatively high silt component or with frequent disturbance will probably continue to emit throughout a wind event. Because most threshold wind speeds are relatively high (i.e., sustained hourly winds of 25 to 30 mph), a wind event may be defined as any time period when winds reach the threshold wind velocities separated by at least 24 hours before a new wind event is defined. Depending on the soils in an area, rain may have a large impact on wind erosion. Days with rain should not be included in the inventory.

Step 5: Develop Emission Inventory Specific Emission Factors. Using the reservoir determination, threshold wind speeds, wind event determination and rainfall factors, determine hours when wind conditions produced emissions from each vacant land parcel for the time period of the emission inventory. The number of hours with wind speeds in each wind speed category should be totaled. The number of hours can then be multiplied by the wind tunnel emission factor and a total emission factor for the time period of the

inventory can be calculated. The emission factor equations for vacant land with and without sustained emissions are given as follows:

(a) With sustained emissions: $EF_1 = (\sum (H\ P))$

where, EF_1 = PM10 emission factor (lb/acre)
H = number of hours when wind conditions result in emissions
P = emission factor for a given vacant land category (lb/hour-acre)

(b) Without sustained emissions: $EF_1 = (\sum (W\ P))$

where, EF_1 = PM10 emission factor (lb/acre)
W = number of wind events when wind conditions result in emissions
P = emission factor for a given vacant land category (lb/acre)

The emission factor equation for spike emissions is given as:

$$EF_2 = (\sum (E\ S))$$

where, EF_2 = spike PM10 emission factor (lb/acre)
E = number of events producing spike emissions
S = spike mass for a given vacant land category (lb/acre)

Emission factors will vary from time period to time period and from vacant land type to vacant land type. Generally speaking, disturbed lands will have unlimited reservoirs and lower threshold wind velocities leading to much higher emissions than stable or sheltered parcels with one hour reservoirs. An emission factor should be developed for each vacant land category in the inventory.

Step 6: Apply Emission Inventory Specific Emission Factors to Vacant Land Categories. Once emission inventory emission factors have been developed, the number of acres in each category should be multiplied by the factor and the emissions totaled. It may be useful to develop certain factors over shorter time periods and then total the emissions over a longer time period. For example, one may want to develop winter factors and summer factors and then total them together for the annual inventory. For large areas, where vacant land categories will change over the duration of an inventory or different meteorological data sets will apply, it is advisable to subdivide the inventory by time period or area, and then total the inventory at the end. Annual emissions for each vacant land category are calculated as follows:

$$E = A\ (EF_1 + EF_2)$$

where, E = annual emissions for a given vacant land category
A = vacant land category acreage
EF_1 = annual emission factor for a given vacant land category
EF_2 = spike emission factor for a given vacant land category

8.4.2 Draxler Method

Based on an evaluation of available algorithms for calculating wind blown fugitive dust emissions, the WRAP expert fugitive dust panel[18] recommended the use of the

algorithm developed by Draxler et al.[19] that was based on the earlier work of Marticorena et al.[20] This algorithm received the highest score on the basis of extensive field verification test results and having undergone peer review. Draxler and coworkers developed their algorithm for estimating fugitive dust emissions during desert dust storms in Iraq, Kuwait, and Saudi Arabia using a Lagrangian transport and dispersion model where the vertical dust flux was proportional to the difference in the squares of the friction velocity and threshold friction velocity. A proportionality constant was used to relate the surface soil texture to the PM10 dust emissions, and is defined as the ratio of vertical flux of PM10 to total aeolian horizontal mass flux. PM10 emissions caused by wind erosion were estimated in a stepwise process as follows:

Step I. Obtain large scale and small scale wind fields
Step II. Estimate sand movement (horizontal flux of saltation particles ≥50 μm)
Step III. Calculate vertical resuspended dust emissions

The horizontal flux of sand, Q (μg/meter-second), was modeled as follows:

$$Q = A\,(\rho/g)\,u^{*}\,(u^{*2} - u^{*2}_{t})$$

where, A = a dimensionless constant
ρ = the density of air
g = the acceleration due to gravity
u^{*} = the friction velocity (m/s)
u^{*}_{t} = the threshold friction velocity (m/s) required for initiation of sand movement by the wind.

The value of A is not constant if there is wetting followed by crusting of the surface sediments, or if there is a depletion of loose particles on the surface for a "supply-limited" surface. The value of A ranges from a maximum of ~3.5 when the surface is covered with loose sand to ~0 when the surface has a smooth crust with few loose particles larger than 1 mm. Suspended dust is proportional to saltation or sandblasting as follows:

$$F = K\,Q$$

where, F = the vertical flux of dust ($\mu g/m^2$-second)
K = proportionality factor (m^{-1}) that relates the surface soil texture to PM10 dust emissions
Q = the horizontal flux of saltating particles (μg/m-second)

The value of K is not precisely known, but data sets of F versus Q are available so that estimates of K can be made for certain soils. For sand textured soils, K is estimated to be ~5.6×10^{-4} m^{-1} and A is ~2.8.

8.4.3 UNLV Method

James and co-workers with the University of Nevada Las Vegas (UNLV) developed a wind blown dust inventory for Clark County, NV based on wind tunnel measurements.[21] The method involved deriving estimates of wind blown fugitive dust emission factors for three categories of vacant land: disturbed vacant land, stabilized vacant land, and

undisturbed native desert soils. The emission factors included geometric mean hourly "spike" corrected emission rates (tons/acre-hour) for disturbed vacant land, stabilized vacant land and undisturbed native desert soils as well as geometric mean spike emissions (ton/acre) for disturbed vacant land and undisturbed native desert soils as a function of wind speed and soil type. The emission inventory assumed that the particulate reservoir for disturbed vacant land had no limit. For every hour the sustained wind speeds were within a given wind speed category above the "spike" wind speed, the emissions were calculated. A single "spike" mass was added for each acre of vacant land for those days that the wind speed exceeded a threshold wind speed, assuming each day represented a single wind event and reservoir recharging would not have occurred during a 24-hour period. Wind speeds less than the "spike" speed were not included in the emission calculations. Because the native desert parcels have a limited PM10 reservoir, it was assumed that the reservoir would be depleted within one hour of sustained winds above the "spike" wind speed. Therefore, only one hour of emissions were calculated during each day that winds exceeded the threshold friction velocity ("spike" wind speed) for native desert parcels.

The wind speed threshold for generating fugitive dust emissions was estimated by James et al.[21] to be 20 mph for disturbed vacant land and 25 mph for native desert parcels. Because the parcels stabilized with dust suppressants had been subjected to some disturbance by vehicle traffic that may have caused some dust palliatives to break down, the initial wind threshold for this category was lower than the other categories, namely 15 mph. However, the use of dust palliatives greatly reduced the overall emission factors. Spikes were generally not observed from the stabilized parcels, and emission factors without spike corrections were used for stabilized parcels. As with native desert, it was assumed that the stabilized parcels have a limited PM10 reservoir that would be depleted within one hour of sustained winds above the threshold wind velocity. Therefore, only one hour of emissions was calculated during each day for stabilized parcels.

For a sustained wind speed of 25 mph, the geometric mean hourly spike corrected emission factors across all soil types for Clark County were estimated to be ~5 x 10^{-3} ton/acre-hour for disturbed vacant land, ~2 x 10^{-3} ton/acre-hour for native desert, and ~2 x 10^{-4} ton/acre-hour for stabilized land. The geometric mean spike emissions for a sustained wind speed of 25 mph were estimated to be ~2 x 10^{-3} ton/acre for disturbed vacant land and ~5 x 10^{-4} ton/acre for undisturbed native desert parcels. It should be pointed out that there was significant scatter in the observed data, with within category variability ranging over 1 to 2 orders of magnitude.

8.4.4 WRAP RMC Method

The Dust Emissions Joint Forum (DEJF) of the Western Regional Air Partnership contracted with ENVIRON to develop a particulate emission calculation method for open area wind erosion in 2003. The DEJF extended ENVIRON's original contract (Phase 2) to provide windblown dust emissions inventories, and perform modeling simulations of the effects of those emissions on regional haze for calendar year 2002 and future year projections. The purpose of this additional effort was to improve the windblown dust

emissions model developed as part of Phase 1. The results of the initial model runs and subsequent sensitivity simulations had demonstrated a need to revise and/or update various assumptions associated with the development of the emission inventory. To this end, revised estimation methodologies and algorithms were evaluated in Phase 2 in order to address various shortcomings and limitations of the Phase 1 version of the model. Many of the assumptions employed in the Phase 1 methodology were necessitated by a lack of specificity in the underlying data used to characterize vacant land types and soil conditions in relation to the potential for wind erosion. Even in Phase 2, it was necessary to rely on some assumptions where data were lacking.

Summary of the WRAP RMC Method

The WRAP RMC windblown dust method utilizes wind tunnel-based emission algorithms for different soils and accounts for land use and local meteorology. The complete set of documents that describe the method in full detail may be found at www.wrapair.org. The summary of the method presented below is based on ENVIRON's final report submitted to the DEJF on May 5, 2006.[22]

There are two important factors for characterizing the dust emission process from an erodible surface. They are (a) the threshold friction velocity that defines the inception of the emission process as a function of the wind speed as influenced by the surface characteristics, and (b) the strength of the emissions that follow the commencement of particle movement. The two critical factors affecting emission strength are the wind speed (wind friction velocity) that drives the saltation system, and the soil characteristics.

Friction Velocities Surface friction velocities are determined from the aerodynamic surface roughness lengths and the 10-meter wind speeds based on MM5 model simulations. Friction velocity, u_*, is related to the slope of the velocity versus the natural logarithm of height through the relationship:

$$\frac{u_z}{u_*} = \frac{1}{\kappa} \ln \frac{z}{z_0}$$

where u_z = wind velocity at height z (m/s)
u_* = friction velocity (m/s)
κ = von Karman's constant (0.4)
z_0 = aerodynamic roughness height (m)

The threshold friction velocities, u_{*t}, are determined from the relationships developed by Marticorena et al.[20] as a function of the aerodynamic surface roughness length, z_0. Figure 8-2 shows the comparison between Marticorena's modeled relationship of threshold friction velocity and aerodynamic surface roughness length and wind tunnel data obtained by different investigators.[23 – 26]

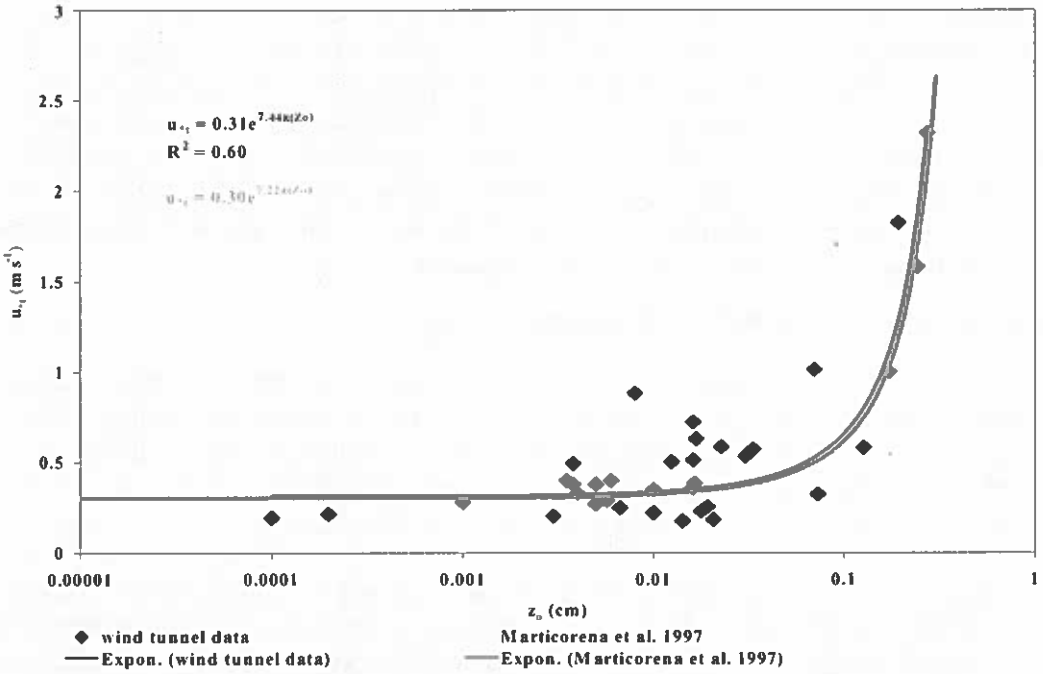

Figure 8-2. Threshold Friction Velocity vs. Aerodynamic Roughness Length

Surface friction velocities, including the threshold friction velocity, are a function of the aerodynamic surface roughness lengths. The surface friction velocities are in turn dependent on surface characteristics, particularly land use/land cover. While these values can vary considerable for a given land type, published data are available which provide a range of surface friction velocities for various land use types and vegetation cover. These data are presented in Table 8-3.

Table 8-3. Threshold Friction Velocities for Typical Surface Types [23-26]

Site Type	Undisturbed u_{*t} (m/s)	Disturbed u_{*t} (m/s)	% change [1-(dist./undist.)]
agricultural fields	1.29	0.55	0.57
alluvial fan	0.72	0.60	0.17
desert flat	0.75	0.51	0.32
desert pavement	2.17	0.59	0.73
fan surface	1.43	0.47	0.67
playa, crusted	2.13	0.63	0.70
playa	1.46	0.58	0.60
prairie	2.90	0.24	0.92
sand dune	0.44	0.32	0.27

Emission Fluxes Emission fluxes, or emission rates, are determined as a function of surface friction velocity and soil texture. The relationships that Chatenet et al.[27] established between the 12 soil types in the classical soil texture triangle and their four dry soil types (silt [FSS], sandy silt [FS], silty sand [MS], and sand [CS]) are of key importance. The relationships developed by Alfaro and others[28, 29] for each of the soil texture groups are used to estimate dust emission fluxes. These relationships are presented in Figure 8-3.

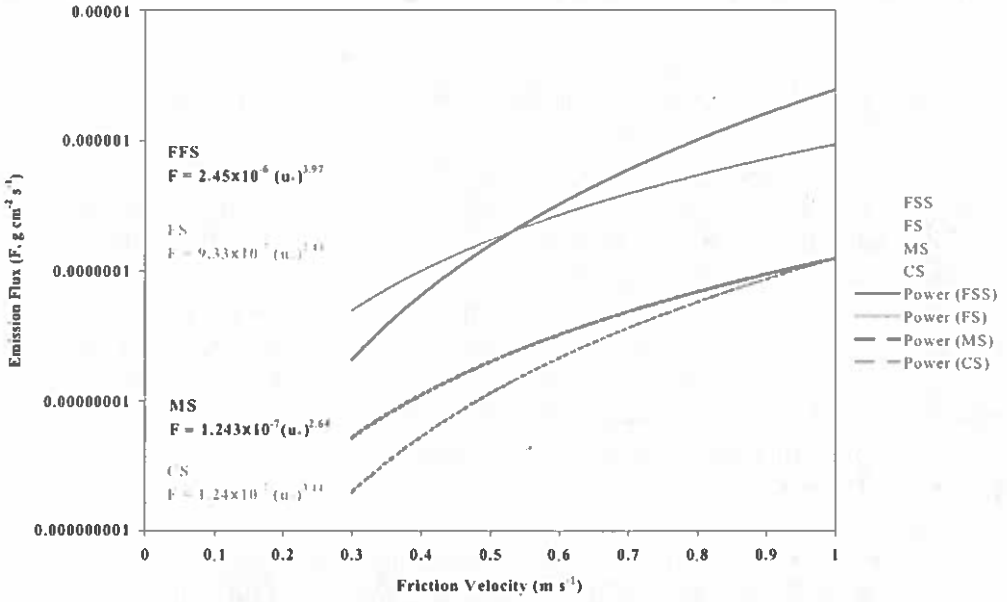

Figure 8-3. Emission Flux vs. Friction Velocity Predicted by the Alfaro and Gomes Model[28] Constrained by the Four Soil Classes of Alfaro et al.[29]

Reservoir Characteristics Reservoirs are classified as limited for stable land parcels and unlimited for unstable land parcels. Classification of reservoirs as limited or unlimited has implications with respect to the duration of time over which the dust emissions are generated. In general, the reservoirs should be classified in terms of the type of soils, the depth of the soil layer, soil moisture content and meteorological parameters. Finally, the time required for a reservoir to recharge following a wind event is influenced by a number of factors including precipitation and snow events and freezing conditions of the soils. A recharge time of 24 hours is assigned to all surfaces. In addition, it is assumed that no surface will generate emissions for more than 10 hours in any 24-hour period.

The duration and amount of precipitation and snow and freeze events will also affect the dust emissions from wind erosion. Barnard[30] has compiled a set of conditions for treating these events based on seasons, soil characteristics and the amounts of rainfall and snow cover. The time necessary to re-initiate wind erosion after a precipitation event ranges from 1 to 10 days, depending on the soil type, season of the year and whether the rainfall amount exceeds 2 inches.

Soil Disturbance The disturbance level of a surface more appropriately has the effect of lowering the threshold surface friction velocity. Except for agricultural lands, which are treated separately in the model as described below, vacant land parcels are typically

undisturbed unless some activity is present such as to cause a disturbance (e.g., off-road vehicle activity in desert lands, or animal grazing on rangelands). It is recommended that all non-agricultural land types be considered undisturbed, since there is no *a priori* information to indicate otherwise for the regional scale modeling domain to be considered. Therefore, for the purpose of evaluating the sensitivity of the model to disturbance levels, all grassland, shrubland and barren land areas are assumed to have 10 % of their land area disturbed. Threshold surface friction velocities for these disturbed lands are assigned as follows: 3.1 m/s for grasslands and shrublands, and 0.82 m/s for barren land.

Soil Characteristics Application of the emission factor relations described above requires the characterization of soil texture in terms of the four soil groups considered by the model. The characteristics or type of soil is one of the parameters of primary importance for the application of the emission estimation relations derived from wind tunnel study results. The State Soil Geographic Database (STATSGO) available from the USDA[31] is used to determine the type of soils present in the modeling domain for which the emission inventory is developed. The classification of soil textures and soil group codes is based on the standard soil triangle that classifies soil texture in terms of percent sand, silt and clay. Combining the soil groups defined by the work of Alfaro et al.[29] and Chatenet et al.[27] and the standard soil triangle provides the mapping of the 12 soil textures to the four soil groups considered in their study. The soil texture mappings are summarized in Table 8-4.

Table 8-4. STATSGO Soil Texture and Soil Group Codes

STATSGO Soil Texture	Soil Texture Code	Soil Group	Soil Group Code
No Data	0	N/A	0
Sand	1	CS	4
Loamy Sand	2	CS	4
Sandy Loam	3	MS	3
Silt Loam	4	FS	1
Silt	5	FSS	2
Loam	6	MS	3
Sandy Clay Loam	7	MS	3
Silty Clay Loam	8	FSS	1
Clay Loam	9	MS	3
Sandy Clay	10	MS	3
Silty Clay	11	FSS	1
Clay	12	FS	2

Surface Roughness Lengths Surface roughness lengths can vary considerably for a given land type, as evidenced by examination of the data in Table 8-5. Surface roughness lengths are assigned as a function of land use type based on a review of the information in Table 8-5. The disturbance level of various surfaces has the effect of altering the surface roughness lengths, which in turn impact the potential for vacant lands to emit dust from wind erosion

Table 8-5. Aerodynamic Surface Aerodynamic Roughness Lengths, Z_0

Site Type	Average z_o (cm)	Reference(s)
agricultural fields (bare)	0.031	23 - 26
desert flat/pavement	0.133	23 - 26
fan surface	0.088	23 - 26
playa, crusted	0.059	23 - 26
playa	0.057	23 - 26
prairie	0.049	23 - 26
sand dune	0.007	23 - 26
scrub desert	0.045	26
sparse veg. (0.04% cover)	0.37	33
sparse veg. (8% cover)	5.4	33
sparse veg. (10.3% cover)	6.8	33
sparse veg. (13.5% cover)	7.2	33
sparse veg. (26% cover)	8.3	33
thick grass	2.3	34
thin grass	5	34
sparse grass	0.12	35
agricultural crops	2-4	35
orchards	50-100	35
decid. forests	100-600	35
conf. forests	100-600	35
agricultural crops	15	36
urban	100	36
decid. forests (closed canopy)	121	36
conif. forests (closed canopy)	134	36

An examination of Figure 8-2, which relates the threshold surface friction velocity to the aerodynamic surface roughness length, reveals that for surface roughness lengths larger than approximately 0.1 cm, the threshold friction velocities increase rapidly above values that can be realistically expected to occur in the meteorological data used in the model implementation. Therefore to simplify the model implementation, only those land types with roughness length less than or equal to 0.1 cm are considered as potentially erodible surfaces.

For a given surface roughness, as determined by the land use type[32], the threshold friction velocity has a constant value. Thus, the land use data is mapped to an internal dust code used within the model to minimize computer resource requirements and coding efforts. The mapping of land use types to dust codes 3 and above (except for code 5 that applies to orchards and vineyards) is presented in Table 8-6, which summarizes the surface characteristics by dust code. [Note: Dust codes 1 and 2 refer to water/wetlands and forest/urban, respectively.]

Table 8-6. Surface Characteristics by Dust Code and Land Use Category

Dust Code	3	4	6	7
Land use category	Agricultural	Grassland	Shrubland	Barren
Surface roughness length, $Z_{0\,(cm)}$	0.031	0.1	0.05	0.002
Threshold friction velocity (m/s)	3.72	6.17	4.30	3.04
Threshold wind velocity at 10 meter height (m/s [mph])	13.2 [29.5]	19.8 [44.3]	14.6 [32.8]	12.7 [28.5]

Meteorology Gridded hourly meteorological data, which is required for the dust estimation methodology is based on MM5 model simulation results. Data fields required include wind speeds, precipitation rates, soil temperatures and ice/snow cover.

Agricultural Land Adjustments Unlike other types of vacant land, windblown dust emissions from agricultural land are subject to a number of non-climatic influences, including irrigation and seasonal crop growth. As a result, several non-climatic correction or adjustment factors were developed for applicability to the agricultural wind erosion emissions. These factors included:

- Long-term effects of irrigation (i.e., soil "clodiness")
- Crop canopy cover
- Post-harvest vegetative cover (i.e., residue)
- Bare soil (i.e., barren areas within an agriculture field that do not develop crop canopy for various reasons, etc.)
- Field borders (i.e., bare areas surrounding and adjacent to agricultural fields)

The methodology used to develop individual non-climatic correction factors was based upon previous work performed by the California Air Resources Board in their development of California-specific adjustment factors for the USDA's Wind Erosion Equation.[37]

Other Adjustments Two other adjustments to modeled air quality impacts relate to fugitive dust transportability and partitioning between fine and coarse fractions of PM10. Transportability fractions as a function of land use are assigned on the basis of the methodology described by Pace.[38] New fine fraction values developed by Cowherd[39] from controlled wind tunnel studies of western soils are applied to determine the fine and coarse fractions of wind-generated fugitive dust emissions.

Concerns Regarding the Method

ENVIRON's methodology for calculating wind-generated fugitive dust emissions relies on several assumptions that may not be valid. As was mentioned above, many of the assumptions employed in Phase 1 were necessitated by a lack of specificity in the underlying data used to characterize vacant land types and soil conditions in relation to the potential for wind erosion. Even in Phase 2, it was necessary to rely on some assumptions where data were lacking.

The pertinent vacant land characteristics that are most difficult to characterize are the dust reservoir capacities and resuspension characteristics in relation to the levels of surface disturbance and the presence of protective surface elements (vegetation, rocks). Another complex feature is the recharge time needed to re-establish all or part of the reservoir after depletion by a wind erosion event.

Surface disturbance tends to have a much stronger impact than soil type in providing a high dust reservoir capacity. If the surface is disturbed in such a way that non-erodible

elements are minimized, it can be considered as having an "unlimited" erosion potential. This means that the reservoir is large enough to support hours of fine particle emissions during a high-wind event. Therefore, it is important any PM10 emission models or empirical relationships account for not only the soil type but also the state of aggregation of the exposed surface material.

After a surface disturbance that creates an unlimited reservoir of available particles, precipitation events can have a major effect in restoring a surface crust and place the surface in a stable condition for an indefinite period. When this occurs, typically a "limited" reservoir will be present on the surface. This reservoir contains only minor amounts of accumulated deposition from previous area-wide wind erosion events or from other more localized fugitive dust sources such as unpaved roads.

Because of the complexity of determining dust reservoir characteristics and their dynamic features, the Phase 2 methodology also tends to rely on assigned characteristics that do not appear to be well founded for most areas subject to wind erosion. For example, the assumed recharge period of only 24 hours is usually unrealistic. For example in the case of agricultural land, this would require a major disturbance to the soil such as a tilling operation that brings fresh, loose and dry soil to the surface. In the absence of a major surface disturbance, actual recharge times may extend to weeks and even months.[40] In some cases, however, a stable surface can transition to a highly erodible state in the absence of mechanical disturbance. The highly alkaline soils at Owens Lake, California for instance are fairly stable during summer months, but can change to a very unstable surface in the winter and spring following periods with precipitation and cold temperatures.[12]

Another example of concern is the value assumed in the Phase 2 model for the estimated time after a precipitation event that it takes to re-initiate wind erosion. The times given for full restoration of the dust reservoir are in the range of 1 to 4 days, depending on the soil type and whether the precipitation exceeded 2 inches. These values are at variance with the results of a multiyear field study conducted by Cowherd et al. in the western Mojave Desert.[41] That study showed that precipitation events of that order could re-stabilize soil surfaces for indefinite periods pending the next major surface disturbance. In the study area, scattered reservoirs of loose sand were stabilized by the presence of desert vegetation.

Stable soils in windy areas tend to have limited reservoirs of erodible particles consisting of a thin surface layer of deposition from previous high wind events. These layers have been homogenized by successive resusupension and atmospheric mixing during wind erosion over many years. This is illustrated by a recently completed inventory of vacant lands in the Las Vegas Valley.[42] This study showed that the vast majority of the land consisted of "native desert" as characterized by a single reflectance signature from satellite imagery with visible and infrared wavelength components. Landsat TM 5 with a 30-meter pixel size was found to provide a useful reflectance averaging that eliminated the effects of micro-features associated with uneven patterns of vegetation. The thin layers of erodible particles appear to exhibit a relatively uniform

chemistry. Therefore, the known soil chemistry differences below the surface layer were not a confounding factor in establishing a single spectral signature for this vacant land category. On the other hand, areas where the soil had been turned as part of land preparation processes for construction projects could not be fitted to a single spectral signature because of surface soil chemistry differences.

Due to the paucity of wind tunnel data, Mansell et al.[17] developed fugitive dust emission factors for wind erosion of vacant land, based on soil texture rather than using area-specific wind tunnel data as recommended by MacDougall.[16] The emission fluxes for four soil aggregate populations were expressed in terms of friction velocity, based on test data from a relatively large portable wind tunnel. It was assumed that the flux would remain constant at any friction velocity for a period of 1 hour or 10 hours depending on whether the surface was classified as having a limited or unlimited reservoir respectively. Mansell and coworkers did not rely on the wind tunnel emission factors derived for Clark County by James et al.[21] because they appeared to be much greater than emission factors measured by other researchers using wind tunnels with a larger cross-section than the UNLV designed wind tunnel (6" wide by 6" high by 60" long).

It should be noted that because ENVIRON's methodology assigns a very short recovery time on (a) replenishing soil losses from high wind events, and on (b) losing the mitigating effects of precipitation, the estimated emissions are driven mostly by wind speed. There is little accounting for the natural tendency of most unlimited reservoir surfaces to re-stabilize for long periods of time in the absence of major surface disturbances or large supplies of available loose sand that can abrade stable crusts. As noted in the land inventory of the Las Vegas Valley cited above, a frequent land disturbance pattern is found only on regularly traveled surfaces, with few exceptions.

Recommendations

In order to use ENVIRON's methodology/model for calculating wind-generated fugitive dust emissions, it is strongly recommended that the user review the necessary inputs for the model, and refine the inputs if better information is available. If a wind blown dust inventory is needed for a planning area, local wind tunnel data, or erosion monitoring using CSC sand flux samplers based on the methodology described by Ono et al.[12] (see Section 8.3) is a very practical approach.

8.5 Demonstrated Control Techniques

Control measures for open area wind erosion are designed to stabilize the exposed surface (e.g., by armoring it with a less erodible cover material) or to shield it from the ambient wind. Table 8-7 presents a summary of control measures and reported control efficiencies for open area wind erosion.

Table 8-7. Control Efficiencies for Control Measures for Open Area Wind Erosion

Control measure	Source Component	PM10 Control Efficiency	References/comments
Apply dust suppressants to stabilize disturbed area after cessation of disturbance	Disturbed areas	84%	CARB, April 2002.[43]
Apply gravel to stabilize disturbed open areas	Disturbed areas	84%	CARB, April 2002.[43] Estimated to be as effective as chemical dust suppressants.

8.6 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. Regulatory formats specify the threshold source size that triggers the need for control application. Example regulatory formats for several local air quality agencies in the WRAP region are presented in Table 8-8. The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: www.maricopa.gov/envsvc/air/ruledesc.asp

8.7 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Table 8-8. Example Regulatory Formats for Open Area Wind Erosion

Control measure	Goal	Threshold	Agency
Watering, fencing, paving, graveling, dust suppressant, vegetative cover, restrict vehicular access	Maintain soil moisture content min 12%; or 70% min of optimum soil moisture content; reduce windblown emissions	Construction sites; fences 3ft-5ft, adjacent to roadways/urban areas;	Maricopa County Rule 310 04/07/2004
Cease ops (wind speed >25mph); applying dust suppressant 2x hr; watering and fencing (as above); for after work hours: gravel, water 3x/day (possibly 4)	Reduce amt of windblown dust leaving site; maintain soil moisture content 12%	Wind speed must be >25mph for 60 min average; fencing must be 3ft-5ft with <50% porosity; watering for after work, holidays, weekends increase to 4x/day during wind event	Maricopa County Rule 310 04/07/2004
Use of one of following for dust control on all disturbed soil to maintain in damp condition: soil crusted over by watering or other, or graveling or treated with dust suppressant	Prevent visible fugitive dust from exceeding 20% opacity, and prevent dust plume from extending more than 100 yd		Clark County Sect. 94 Air Quality Reg. 06/22/2000
Requires application of water or chemical stabilizers prior to wind event 3 times a day (possible increase to 4 times a day if evidence of wind driven dust), or establish a vegetative cover within 21 days after active operations have ceased to maintain a stabilized surface for 6 months		For operations that remain inactive for not more than 4 consecutive days	SCAQMD Rule 403 12/11/1998

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations. An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Table 8-9 summarizes the compliance tools that are applicable to open area wind erosion.

Table 8-9. Compliance Tools for Open Area Wind Erosion

Record keeping	Site inspection/monitoring
Soil stabilization methods; application frequencies, rates, and times for dust suppressants; establishment/ maintenance of wind breaks.	Crust strength determination (e.g., drop ball test); observation of operation of dust suppression systems; inspection of heights and porosities of windbreaks.

8.8 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for fugitive dust originating from open area wind erosion. A sample cost-effectiveness calculation is presented below for a specific control measure (apply gravel) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous control measure for open area wind erosion, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation For Open Area Wind Erosion (Dirt Parking Lot)

Step 1. Determine source activity and control application parameters.

Area of dirt parking lot	10,000 m^2
Disturbance frequency per day	1
Duration of exposure (months)	12
Roughness height (cm)	0.5
Threshold peak wind speed at height of 10 m (m/s)	10

Control Measure	Apply gravel
Control application/frequency	Once every years
Economic Life of Control System (yr)	5
Threshold friction velocity for gravel (m/s)	1.9
Control Efficiency (%)	84
Reference for Control Efficiency	Sierra Research (2003) [44]

The field size, source activity parameters, and control measure parameters are assumed values for illustrative purposes. Applying a 3" deep gravel bed over the dirt has been chosen as the applied control measure.

Step 2. Obtain PM10 Emission Factor.

The PM10 emission factor is obtained from AP-42: PM10 EF = $0.5 \sum_{i=1}^{N} P_i$

P—erosion potential (g/m^2) $P = 58 (u^*-u^*_t)^2 + 25 (u^*-u^*_t)$

$P = 0$ for $u^* \leq u_t^*$

Threshold friction velocity u^*_t (m/s) = $0.053\ u^+_{10}$ 0.53

Step 3. Calculate Uncontrolled PM Emissions. The PM10 emission factor (obtained in Step 2) is applied to each day for which the peak wind exceeds the threshold velocity for wind erosion. The following monthly climatic data are used for illustrative purposes and are assumed to apply to each month of the year.

Monthly erosion potential (P) [a]				
Day of Month	Peak Wind (u^+_{10}) mph	m/s	u* m/s	P g/m^2
6	29	13.0	0.69	5.36
7	30	13.4	0.71	6.41
11	38	17.0	0.90	17.21
22	25	11.2	0.59	1.78
			Sum of P	30.77

[a] Assumed to apply to 12 months of the year.

The annual PM10 emissions are equal to the PM10 emission factor (i.e., 0.5 times the monthly erosion potential) multiplied by 12 and then by the field size (under activity data) and then divided by 454 g/lb and 2,000 lb/ton to compute the annual PM10 emissions in tons per year, as follows:

Annual PM10 emissions = (Emission Factor x Field Size) / (454 x 2,000)
Annual PM10 emissions = (0.5 x 0.77 x 12 x 10,000) / (454 x 2,000)
Annual PM10 emissions = 2.03 tons

Annual PM2.5 emissions = 0.15 x PM10 emissions[12] = 0.15 x 2.03 = 0.30 tons

Step 4. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) are equal to the uncontrolled emissions (calculated above in Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency).

For this example, we have selected applying gravel over the dirt parking lot as our control measure. Based on a control efficiency estimate of 84% for this control measure, the annual controlled emissions estimate are calculated to be:

Annual Controlled PM10 emissions = 0.33 tons
Annual Controlled PM2.5 emissions = 0.049 tons

Step 5. Determine Annual Cost to Control PM Emissions.

Capital costs ($)	50,000
Annual Operating/Maintenance costs ($)	4,000
Annual Interest Rate	3%
Capital Recovery Factor	0.2184
Annualized Cost ($/yr)	13,173

The capital costs, annual operating and maintenance costs, and annual interest rate (AIR) are assumed values for illustrative purposes. The Capital Recovery Factor (CRF) is calculated from the Annual Interest Rate (AIR) and the Economic Life of the control system, as follows:

$$\text{Capital Recovery Factor} = AIR \times (1+AIR)^{\text{Economic life}} / (1+AIR)^{\text{Economic life}} - 1$$

$$\text{Capital Recovery Factor} = 3\% \times (1+3\%)^{5} / (1+3\%)^{5} - 1 = 0.2184$$

The Annualized Cost is calculated by adding the product of the Capital Recovery Factor and the Capital costs to the Annual Operating/Maintenance:

Annualized Cost = (CRF x Capital costs) + Annual Operating/Maintenance costs
Annualized Cost = (0.2084 x 50,000) + 4,000 = 14,918

Step 6. Calculate Cost-effectiveness. Cost-effectiveness is calculated by dividing the annualized cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions:

Cost-effectiveness = Annualized Cost/ (Uncontrolled emissions – Controlled emissions)

Cost-effectiveness for PM10 emissions = $14,918 / (2.03 - 0.33) = $8,735/ton
Cost-effectiveness for PM2.5 emissions = $14,918 / (0.30 - 0.049) = $58,234/ton

8.9 References

1. Cowherd, C. Jr., 1983. *A New Approach to Estimating Wind Generated Emissions from Coal Storage Piles,* Presented at the APCA Specialty Conference on Fugitive Dust Issues in the Coal Use Cycle, Pittsburgh, PA, April.

2. Axtell, K., Cowherd, C. Jr., 1984. *Improved Emission Factors for Fugitive Dust from Surface Coal Mining Sources*, EPA-600/7-84-048, U.S. EPA, Cincinnati, OH, March.

3. Muleski, G.E., 1985. *Coal Yard Wind Erosion Measurement*, Midwest Research Institute, Kansas City, MO, March 1985.

4. MRI, 1988. *Update of Fugitive Dust Emissions Factors in AP-42 Section 11.2-Wind Erosion*, MRI No. 8985-K, Midwest Research Institute, Kansas City, MO.

5. Chepil, W.S., 1952. *Improved Rotary Sieve for Measuring State and Stability of Dry Soil Structure,* Soil Science Society of America Proceedings, *16*:113-117.

6. Gillette, D.A., *et al.*, 1980. *Threshold Velocities for Input of Soil Particles into the Air by Desert Soils*, Journal of Geophysical Research, *85*(C10):5621-5630.

7. Local Climatological Data, National Climatic Center, Asheville, NC.

8. Changery, M.J., 1978. *National Wind Data Index Final Report*, HCO/T1041-01 UC-60, National Climatic Center, Asheville, NC, December.

9. Billings-Stunder, J.B., Arya, S.P.S., 1988. *Windbreak Effectiveness for Storage Pile Fugitive Dust Control: A Wind Tunnel Study*, J. APCA, *38*:135-143.

10. Cowherd, C. Jr., *et al.*, 1988. *Control of Open Fugitive Dust Sources*, EPA 450/3-88-008, U.S. EPA, Research Triangle Park, NC, September.

11. MRI, 2006. Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Emission Factors, prepared for the WRAP by Midwest Research Institute, Project No. 110397, February 1.

12. Ono, D., Weaver, S., Richmond, K. April 2003. *Quantifying Particulate Matter Emissions from Wind Blown Dust Using Real-time Sand Flux Measurements*, paper presented at the 12th Annual EPA Emission Inventory Conference in San Diego, CA.

13. Gillette, D., Ono, D., and Richmond, K., 2004. *A Combined Modeling and Measurement Technique for Estimating Windblown dust Emissions at Owens (dry) Lake, California,* Journal of Geophysical Research 109, F01103.

14. Ono., D., 2006. *Application of the Gillette Model for Windblown Dust at Owens Lake, CA,* Atmos. Environ., 40: 3011-3021.

15. Gillette, D. A., Niemeyer, T. C., Helm, P. J, 2001. *Supply-limited Horizontal Sand Drift at an Ephemerally Crusted, Unvegetated Saline Playa*, Journal of Geophysical Research, 106, 18085-18,098.

16. MacDougall, C., 2002. *Empirical Method for Determining Fugitive Dust Emissions from Wind Erosion of Vacant Land*, memorandum prepared for Clark County Department of Air Quality Management, June.

17. Mansell, G. E., Wolf, M., Gillies, J., Barnard, W., Omary, M, 2004. *Determining Fugitive Dust Emissions from Wind Erosion,* ENVIRON final report prepared for Western Governors' Association, March.

18. Countess Environmental, 2002. *A Review and Update of Fugitive Dust Emissions Estimation Methods*, final report prepared for the Western Governors' Association, November.

19. Draxler, R.R., Gillette, D.A., Kirkpatrick, J.S., Heller, J., 2001. E*stimating PM10 Air Concentrations from Dust Storms in Iraq, Kuwait and Saudi Arabia*, Atmospheric Environment 35:4315.

20. Marticorena, B., Bergametti, G., Gillette, D., Belnap, J., 1997. *Factors Controlling Threshold Friction Velocity in Semiarid and Arid Areas of the United States*, J. Geophys. Res., 102:23277.

21. James, D., Haun, J.A., Gingras, T., Fulton, A., Pulgarin, J., Venglas, G., Becker, J., Edwards, S., January 2001. *Estimation of PM10 Vacant Land Emission Factors for Unstable, Stable and Stabilized Lands Using Data from 1995 and 1998-1999 UNLV Wind Tunnel Studies of Vacant and Dust-Suppressant Treated Lands,* final report prepared for the Clark County Department of Comprehensive Planning.

22. Mansell, G.E., Lau, S., Russel, J and Omary, M., 2006. *Fugitive Wind Blown Dust Emissions and Model Performance Evaluation Phase II,* final report prepared by ENVIRON for Western Governors' Association, May 5.

23. Gillette, D.A., Adams, J., Endo, E. and Smith, D., 1980. *Threshold Velocities for Input of Soil Particles into the Air by Desert Soils*, Journal of Geophysical Research, 85(C10): 5621-5630.

24. Gillette, D.A., Adams, J., Muhs, D. and Kihl, R., 1982. *Threshold Friction Velocities and Rupture Moduli for Crusted Desert Soils for the Input of Soil Particles into the Air,* Journal of Geophysical Research, 87(C10): 9003-9015

25. Gillette, D.A., 1988. *Threshold Friction Velocities for Dust Production for Agricultural Soils*, Journal of Geophysical Research: 93(D10), 12645-12662.

26. Nickling, W.G. and Gillies, J.A., 1989. *Emission of Fine Grained Particulate from Desert Soils*, in: Paleoclimatology and Paleometeorology: Modern and Past Patterns of Global Atmospheric Transport, M. Leinen and M. Sarnthein (Editors), Kluwer Academic Publishers, pp. 133-165.

27. Chatenet, B., Marticorena, B., Gomes, L., and Bergametti, G, 1996. *Assessing the Microped Size Distributions of Desert soils Erodible by Wind*, Sedimentolog. 43: 901-911.

28. Alfaro, S. C. and Gomes, L., 2001. *Modeling Mineral Aerosol Production by Wind erosion: Emission Intensities and Aerosol Size Distributions in Source Areas,* J. Geophys. Res.: 106 (16), 18075-18084.

29. Alfaro, S. C., Rajot, J. I., and Nickling W. G., 2003. *Estimation of PM20 Emissions by Wind Erosion: Main Sources of Uncertainties*, Geomophology.

30. Barnard, W. 2003. Personal communication between Gerry Mansell of Environ and Bill Barnard of MACTEC Engineering & Consulting, Gainesville, FL, April.

31. USDA, 1994. *State Soil Geographic (STATSGO) Data Base, Data Use Information.* U.S. Department of Agriculture, Natural Resources Conservation Service, National Soil Service Center, Miscellaneous Publication Number 1492, December.

32. Latifovic, R., Zhu, Z-L., Cihlar, J. and Giri, C., 2002. *Land Cover of North America 2000*, Natural Resources Canada, Centre for Remote Sensing US Geological Services, EROS Data Center.

33. Wolfe, S. A., 1993. *Sparse Vegetation as a Control on Wind Erosion,* Ph.D. thesis, University of Guelph, Guelph, Ontario.

34. Sutton, O. G., 1953. Micrometeorology, McGraw-Hill, New York.

35. Oke, T. R., 1978. Boundary Layer Climates, Methuen Company, London.

36. Deursen, W. van, Heil, G. W., and Boxtel, A., van, 1993. *Using Remote Sensing Data to Compile Roughness Length Maps for Atmospheric Deposition Models*, International Symposium "Operationalisation of Remote Sensing," ITC Enschede, Netherlands.

37. CARB, 1997. *Section 7.11 - Supplemental Documentation for Windblown Dust - Agricultural Lands,* California Air Resources Board, Emission Inventory Analysis Section, Sacramento, California, April.

38. Pace, T.G., 2005. *Methodology to Estimate the Transportable Fraction of Fugitive Dust Emissions for Regional & Urban Scale Air Quality Analyses*, U.S. EPA, June 2.

39. Cowherd, C., 2005. *Analysis of the Fine Fraction of Particulate Matter in Fugitive Dust*, Draft report prepared by Midwest Research Institute for the Western Governors Association, August 17.

40. Cowherd, C., Jr., Grelinger, M.A. and Kies, C., 2001. *Effect of Wildfires and Controlled Burning on Soil Erodibility by Wind,* final report prepared by Midwest Research Institute for Radian Rocky Flats Environmental Technology Site, May.

41. Cowherd, C., Jr., and M.A. Grelinger, 2005. *Wind Erodibility Assessment of Stabilized Soils in the Antelope Valley,* draft final report prepared by Midwest Research Institute for Southern California Edison.

42. Kemner, W., Hall, F., Cowherd, C. and Borengasser, M., 2005. *Remote Sensing Imagery for an Inventory of Vacant Land Soil Stability and Unpaved Private Roads,* draft final report prepared by Environmental Quality Management and Midwest Research Institute for Clark County NV, December.

43. CARB, April 2002. *Evaluation of Air Quality Performance Claims for Soil-Sement Dust Suppressant.*

44. Sierra Research, 2003. *Final BACM Technological and Economic Feasibility Analysis,* prepared for the San Joaquin Valley Unified APCD, March.

Chapter 9. Storage Pile Wind Erosion

9.1 Characterization of Source Emissions 9-1
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9.1 Characterization of Source Emissions

Dust emissions may be generated by wind erosion of open areas of exposed soils or other aggregate materials within an industrial facility. These sources typically are characterized by nonhomogeneous surfaces impregnated with nonerodible elements (particles larger than approximately 1 centimeter [cm] in diameter). Field testing of coal piles and other exposed materials using a portable wind tunnel has shown that: (a) threshold wind speeds exceed 5 meters per second (m/s) (11 miles per hour [mph]) at 15 cm above the surface or 10 m/s (22 mph) at 7 m above the surface, and (b) particulate emission rates tend to decay rapidly (half-life of a few minutes) during an erosion event. In other words, these aggregate material surfaces are characterized by finite availability of erodible material (mass/area) referred to as the erosion potential. Any natural crusting of the surface binds the erodible material, thereby reducing the erosion potential. Loose soils or other aggregate materials consisting of sand-sized materials act as an unlimited reservoir of erodible material and can sustain emissions for periods of hours without substantial decreases in emission rates.

If typical values for threshold wind speed at 15 cm are corrected to typical wind sensor height (7 to 10 m), the resulting values exceed the upper extremes of hourly mean wind speeds observed in most areas of the country. In other words, mean atmospheric wind speeds are not sufficient to sustain wind erosion from flat surfaces of the type tested. However, wind gusts may quickly deplete a substantial portion of the erosion potential. Because erosion potential has been found to increase rapidly with increasing wind speed, estimated emissions should be related to the gusts of highest magnitude. The routinely measured meteorological variable that best reflects the magnitude of wind gusts is the fastest mile. This quantity represents the wind speed corresponding to the whole mile of wind movement that has passed by the 1 mile contact anemometer in the least amount of time. Daily measurements of the fastest mile are presented in the monthly Local Climatological Data (LCD) summaries. The duration of the fastest mile, typically about 2 minutes (for a fastest mile of 30 mph), matches well with the half-life of the erosion process, which ranges between 1 and 4 minutes. It should be noted, however, that peak winds can significantly exceed the daily fastest mile.

The wind speed profile in the surface boundary layer is found to follow a logarithmic distribution as follows:

$$u(z) = \frac{u^*}{0.4} \ln \frac{z}{z_0} \quad (z > z_0) \tag{1}$$

where,

- u = wind speed (cm/s)
- u^* = friction velocity (cm/s)
- z = height above test surface (cm)
- z_0 = roughness height (cm)
- 0.4 = von Karman's constant (dimensionless)

The friction velocity (u^*) is a measure of wind shear stress on the erodible surface, as determined from the slope of the logarithmic velocity profile. The roughness height (z_0) is a measure of the roughness of the exposed surface as determined from the y-intercept

of the velocity profile, i.e., the height at which the wind speed is zero. These parameters are illustrated in Figure 9-1 for a roughness height of 0.1 cm.

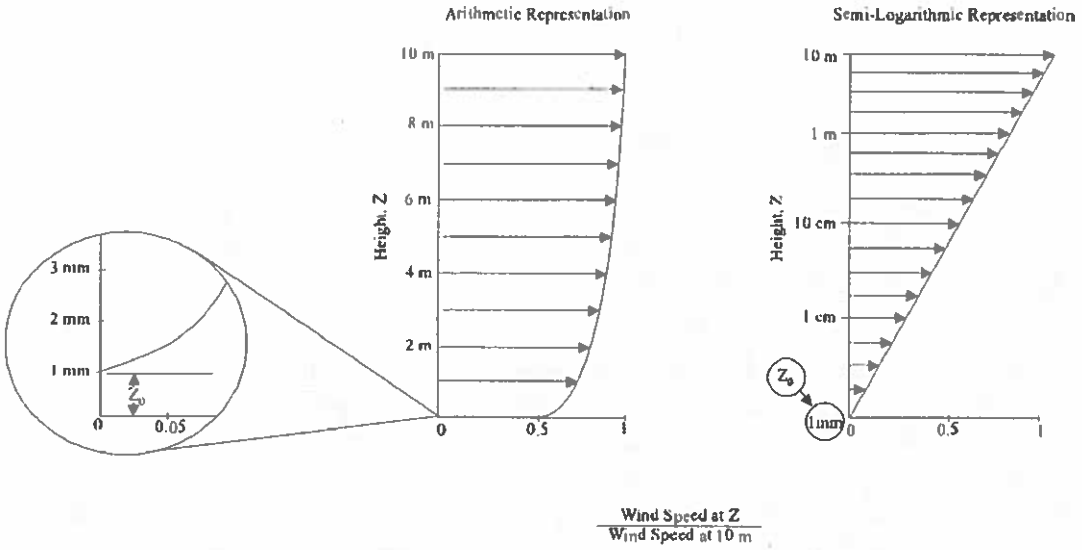

Figure 9-1. Illustration of Logarithmic Wind Velocity Profile

Emissions generated by wind erosion are also dependent on the frequency of disturbance of the erodible surface because each time that a surface is disturbed, its erosion potential is restored. A disturbance is defined as an action that results in the exposure of fresh surface material. On a storage pile, this would occur whenever aggregate material is either added to or removed from the old surface. A disturbance of an exposed area may also result from the turning of surface material to a depth exceeding the size of the largest pieces of material present.

9.2 Emission Estimation: Primary Methodology [1-11]

This section was adapted from Section 13.2.5 of EPA's *Compilation of Air Pollutant Emission Factors (AP-42)*. Section 13.2.5 was last updated in January 1995.

The PM10 emission factor for wind-generated particulate emissions from mixtures of erodible and nonerodible surface material subject to disturbance may be expressed in units of grams per square meter (g/m^2) per year as follows:

$$\text{PM10 Emission Factor} = 0.5 \sum_{i=1}^{N} P_i \qquad (2)$$

where,

N = number of disturbances per year

Pi = erosion potential corresponding to the observed (or probable) fastest mile of wind for the ith period between disturbances (g/m^2)

In calculating emission factors, each area of an erodible surface that is subject to a different frequency of disturbance should be treated separately. For a surface disturbed

daily, N = 365 per year, and for a surface disturbance once every 6 months, N = 2 per year. The erosion potential function for a dry, exposed surface is given as:

$$P = 58 (u^* - u_t^*)^2 + 25 (u^* - u_t^*) \quad (3)$$

$$P = 0 \text{ for } u^* \leq u_t^*$$

where,

u^* = friction velocity (m/s)

u_t = threshold friction velocity (m/s)

Because of the nonlinear form of the erosion potential function, each erosion event must be treated separately. The PM2.5/PM10 ratio for windblown fugitive dust posted on EPA's CHIEF website is 0.15 based on the analysis conducted by MRI on behalf of WRAP.[11]

Equations 2 and 3 apply only to dry, exposed materials with limited erosion potential. The resulting calculation is valid only for a time period as long or longer than the period between disturbances. Calculated emissions represent intermittent events and should not be input directly into dispersion models that assume steady-state emission rates. For uncrusted surfaces, the threshold friction velocity is best estimated from the dry aggregate structure of the soil. A simple hand sieving test of surface soil can be used to determine the mode of the surface aggregate size distribution by inspection of relative sieve catch amounts, following the procedure described below.

FIELD PROCEDURE FOR DETERMINING THRESHOLD FRICTION VELOCITY
(from a 1952 laboratory procedure published by W. S. Chepil[5])

Step 1. Prepare a nest of sieves with the following openings: 4 mm, 2 mm, 1 mm, 0.5 mm, and 0.25 mm. Place a collector pan below the bottom (0.25 mm) sieve.

Step 2. Collect a sample representing the surface layer of loose particles (approximately 1 cm in depth, for an encrusted surface), removing any rocks larger than about 1 cm in average physical diameter. The area to be sampled should be not less than 30 cm by 30 cm.

Step 3. Pour the sample into the top sieve (4-mm opening), and place a lid on the top.

Step 4. Move the covered sieve/pan unit by hand, using a broad circular arm motion in the horizontal plane. Complete 20 circular movements at a speed just necessary to achieve some relative horizontal motion between the sieve and the particles.

Step 5. Inspect the relative quantities of catch within each sieve, and determine where the mode in the aggregate size distribution lies, i.e., between the opening size of the sieve with the largest catch and the opening size of the next largest sieve.

Step 6. Determine the threshold friction velocity from Table 9-1.

The results of the sieving can be interpreted using Table 9-1. Alternatively, the threshold friction velocity for erosion can be determined from the mode of the aggregate size distribution using the graphical relationship described by Gillette.[5, 6] If the surface material contains nonerodible elements that are too large to include in the sieving (i.e., greater than about 1 cm in diameter), the effect of the elements must be taken into account by increasing the threshold friction velocity.[10]

Table 9-1. Field Procedure for Determination of Threshold Friction Velocity (Metric Units)

Tyler Sieve No.	Opening (mm)	Midpoint (mm)	u_t^* (cm/s)
5	4		
9	2	3	100
16	1	1.5	76
32	0.5	0.75	58
60	0.25	0.375	43

Threshold friction velocities for several surface types have been determined by field measurements with a portable wind tunnel. These values are presented in Table 9-2.

Table 9-2 Threshold Friction Velocities (Metric Units)

Material	Threshold friction velocity (m/s)	Roughness height (cm)	Threshold wind velocity at 10 m (m/s)	
			z_o = Actual	z_o = 0.5 cm
Overburden[a]	1.02	0.3	21	19
Scoria (roadbed material)[a]	1.33	0.3	27	25
Ground coal (surrounding coal pile)[a]	0.55	0.01	16	10
Uncrusted coal pile[a]	1.12	0.3	23	21
Scraper tracks on coal pile[a,b]	0.62	0.06	15	12
Fine coal dust on concrete pad[c]	0.54	0.2	11	10

[a] Western surface coal mine; reference 2.
[b] Lightly crusted.
[c] Eastern power plant; reference 3.

The fastest mile of wind for the periods between disturbances may be obtained from the monthly local climatological data (LCD) summaries for the nearest reporting weather station that is representative of the site in question.[7] These summaries report actual fastest mile values for each day of a given month. Because the erosion potential is a highly nonlinear function of the fastest mile, mean values of the fastest mile are inappropriate. The anemometer heights of reporting weather stations are found in Reference 8, and should be corrected to a 10-m reference height using Equation 1. To convert the fastest mile of wind (u^+) from a reference anemometer height of 10 m to the equivalent friction velocity (u^*), the logarithmic wind speed profile may be used to yield the following equation:

$$u^* = 0.053\, u_{10}^+ \qquad (4)$$

where,

u^* = friction velocity (m/s)
u_{10}^+ = fastest mile of reference anemometer for period between disturbances (m/s)

This assumes a typical roughness height of 0.5 cm for open terrain. Equation 4 is restricted to large relatively flat exposed areas with little penetration into the surface wind layer.

If the pile significantly penetrates the surface wind layer (i.e., with a height-to-base ratio exceeding 0.2), it is necessary to divide the pile area into subareas representing different degrees of exposure to wind. The results of physical modeling show that the frontal face of an elevated pile is exposed to wind speeds of the same order as the approach wind speed at the top of the pile.

For two representative pile shapes (conical and oval with flattop, 37-degree side slope), the ratios of surface wind speed (u_s) to approach wind speed (u_r) have been derived from wind tunnel studies.[9] The results are shown in Figure 9-2 corresponding to an actual pile height of 11 m, a reference (upwind) anemometer height of 10 m, and a pile surface roughness height (z_o) of 0.5 cm. The measured surface winds correspond to a height of 25 cm above the surface. The area fraction within each contour pair is specified in Table 9-3.

Table 9-3. Subarea Distribution for Regimes of u_s/u_r

	Percent of pile surface area			
Pile subarea	Pile A	Pile B1	Pile B2	Pile B3
0.2a	5	5	3	3
0.2b	35	2	28	25
0.2c	NA	29	NA	NA
0.6a	48	26	29	28
0.6b	NA	24	22	26
0.9	12	14	15	14
1.1	NA	NA	3	4

NA = not applicable.

The profiles of u_s/u_r in Figure 9-2 can be used to estimate the surface friction velocity distribution around similarly shaped piles, using the following procedure:

Step 1. Correct the fastest mile value (u^+) for the period of interest from the anemometer height (z) to a reference height of 10 m (u^+_{10}) using a variation of Equation 1:

$$u^+_{10} = u^+ \frac{\ln (10/0.005)}{\ln (z/0.005)} \qquad (5)$$

where a typical roughness height (z_o) of 0.5 cm (0.005 m) has been assumed. If a site-specific roughness height is available, it should be used.

Step 2. Use the appropriate part of Figure 9-2 based on the pile shape and orientation to the fastest mile of wind, to obtain the corresponding surface wind speed distribution (u^+_s):

$$u^+_s = \frac{(u_s)}{u_r} \; u^+_{10} \qquad (6)$$

Step 3. For any subarea of the pile surface having a narrow range of surface wind speed, use a variation of Equation 1 to calculate the equivalent friction velocity (u^*): $u^* = (0.4\, u^+_s) / \ln (25 / 0.5) = 0.10\, u^+_s$ (7)

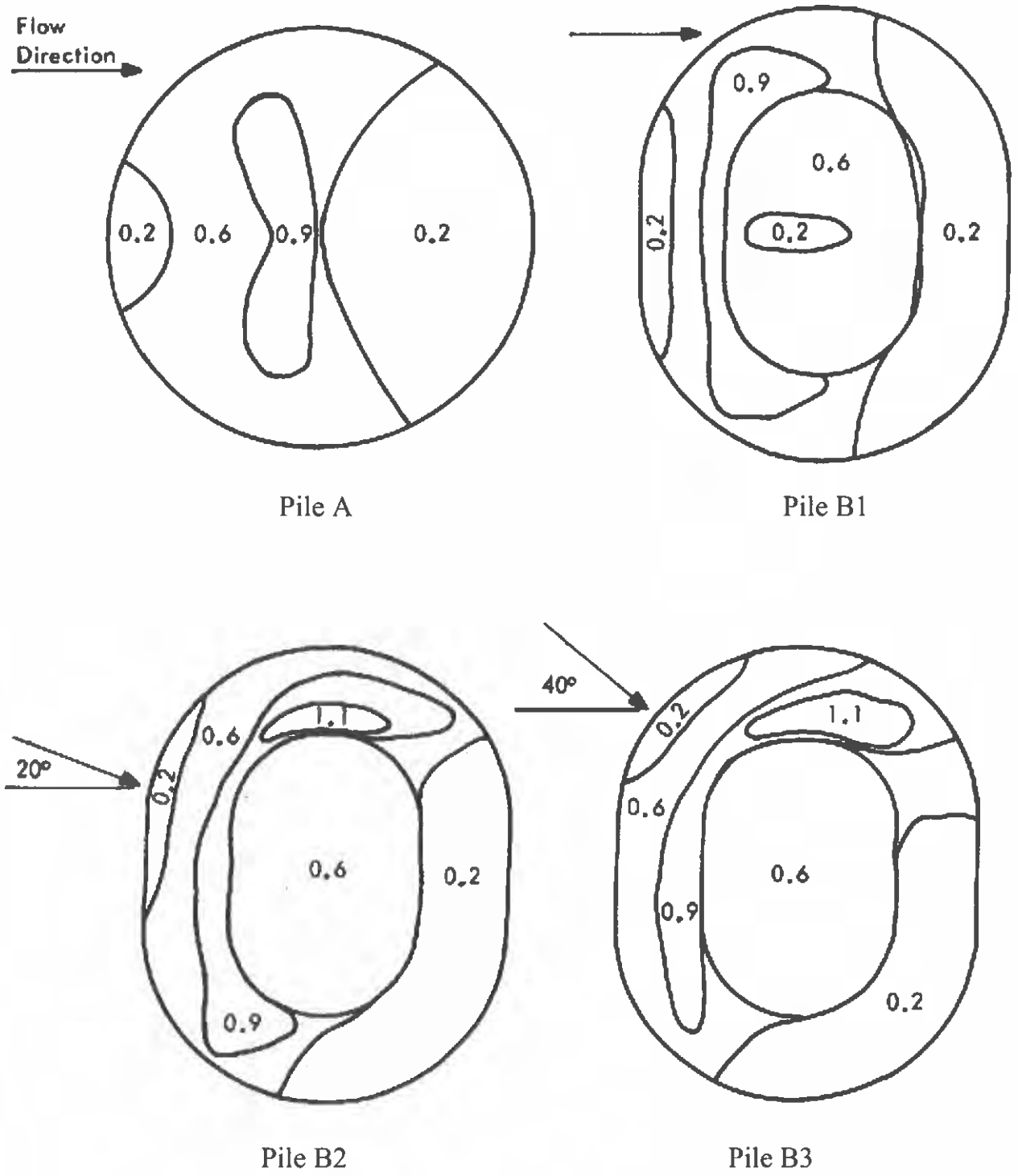

Figure 9-2. Contours of Normalized Surface Wind Speed Ratios, u_s/u_r

From this point on, the procedure is identical to that used for a flat pile, as described above. Implementation of the above procedure is carried out in the following steps:

Step 1. Determine threshold friction velocity for erodible material of interest (see Table 9-2 or determine from mode of aggregate size distribution).

Step 2. Divide the exposed surface area into subareas of constant frequency of disturbance (N).

Step 3. Tabulate fastest mile values (u^+) for each frequency of disturbance and correct them to 10 m (u_{10}^+) using Equation 5.

Step 4. Convert fastest mile values (u_{10}) to equivalent friction velocities (u^*), taking into account (a) the uniform wind exposure of nonelevated surfaces, using Equation 4, or (b) the nonuniform wind exposure of elevated surfaces (piles), using Equations 6 and 7.

Step 5. For elevated surfaces (piles), subdivide areas of constant N into subareas of constant u^* (i.e., within the isopleth values of u_s/u_r in Figure 9-2 and Table 9-3) and determine the size of each subarea.

Step 6. Treating each subarea (of constant N and u^*) as a separate source, calculate the erosion potential (P_i) for each period between disturbances using Equation 3 and the emission factor using Equation 2.

Step 7. Multiply the resulting emission factor for each subarea by the size of the subarea, and add the emission contributions of all subareas. Note that the highest 24-hour emissions would be expected to occur on the windiest day of the year. Maximum emissions are calculated assuming a single event with the highest fastest mile value for the annual period.

The recommended emission factor equation presented above assumes that all of the erosion potential corresponding to the fastest mile of wind is lost during the period between disturbances. Because the fastest mile event typically lasts only about 2 minutes, which corresponds roughly to the half-life for the decay of actual erosion potential, it could be argued that the emission factor overestimates particulate emissions. However, there are other aspects of the wind erosion process that offset this apparent conservatism as follows:

1. The fastest mile event contains peak winds that substantially exceed the mean value for the event.
2. Whenever the fastest mile event occurs, there are usually a number of periods of slightly lower mean wind speed that contain peak gusts of the same order as the fastest mile wind speed.

Of greater concern is the likelihood of over prediction of wind erosion emissions in the case of surfaces disturbed infrequently in comparison to the rate of crust formation.

9.3 Emission Estimation: Alternate Methodology

EPA published a total suspended particulate (TSP) emission factor equation for wind erosion of active storage piles in 1989 that is not included in AP-42.[12] For days when there was at least 0.01 inch of precipitation, the TSP emissions were zero. The TSP emission factor equation (in units of lb/day/acre of surface) for days when there was less than 0.01 inch of precipitation was given as:

$E_{TSP} = 1.7 (s/1.5) (f/15)$

where, s = silt content of material (weight %)
f = percentage of time the unobstructed wind speed is greater than 12 mph at the mean pile height

The annual TSP emissions factor equation for wind blown dust from active storage piles was given as follows:

TSP (lb/year/acre of surface) = 1.7 (s/1.5) (365 [365-p] / 235) (f/15)

where, s = silt content of material (weight %)
p = number of days per year with at least 0.01 inch of precipitation
f = percentage of time the unobstructed wind speed is greater than 12 mph at the mean pile height

Based on the PM10/TSP ratio of 0.5 for wind blown dust from active storage piles published in Section 13.2.5 of AP-42 and a PM2.5/PM10 ratio of 0.15 for wind blown dust[11], the PM10 and PM2.5 emission factor equations (in units of lb/day/acre) would be:

$E_{PM10} = 0.85 (s/1.5) (f/15)$
$E_{PM2.5} = 0.13 (s/1.5) (f/15)$

The short-term hourly TSP emission factor equation for wind blown dust from active storage piles (in units lb/acre-hour) given in the 1989 EPA report was equal to the wind speed (in units of mph) multiplied by a factor of 0.72. Thus for a wind speed that averaged 25 mph during a one-hour period, the TSP emission factor during that hour would be 18 lb/acre which is equal to 2.02 g/m^2. The corresponding PM10 and PM2.5 emission factors would be 1.01 g/m^2 and 0.15 g/m^2, respectively.

9.4 Demonstrated Control Techniques

Control measures for storage pile wind erosion are designed to stabilize the erodible surface (e.g., by increasing the moisture content of the aggregate material being stored) or to shield it from the ambient wind. Table 9-4 presents a summary of control measures and reported control efficiencies for storage pile wind erosion.

Table 9-4. Control Efficiencies for Control Measures for Storage Pile Wind Erosion

Control measure	PM10 control efficiency	References/comments
Require construction of 3-sided enclosures with 50% porosity	75%	Sierra Research, 2003.[13] Determined through modeling of open area windblown emissions with 50% reduction in wind speed and assuming no emission reduction when winds approach open side
Water the storage pile by hand or apply cover when wind events are declared	90%	Fitz et al., April 2000.[14]

9.5 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. Regulatory formats specify the threshold source size that triggers the need for control application. Example regulatory formats for several local air quality agencies in the WRAP region are presented in Table 9-5. The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: http://www.maricopa.gov/envsvc/air/ruledesc.asp

(Note: The Clark County website did not include regulatory language specific to storage pile wind erosion at the time this chapter was written.)

9.6 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations. An inspector can use photography to document compliance with an air quality regulation.

Table 9-5. Example Regulatory Formats for Storage Pile Wind Erosion

Control Measure	Goal	Threshold	Agency
Establishes wind barrier and watering or stabilization requirements and bulk materials must be stored according to stabilization definition and outdoor materials covered	Limit visible dust emissions to 20% opacity		SJVAPCD Rule 8031 11/15/2001
Best available control measures: wind sheltering, watering, chemical stabilizers, altering load-in/load-out procedures, or coverings	Prohibits visible dust emissions beyond property line and limits upwind/downwind PM10 differential to 50 ug/m3		SCAQMD Rule 403 12/11/1998
Watering, dust suppressant (when loading, stacking, etc.); cover with tarp, watering (when not loading, etc.); wind barriers, silos, enclosures, etc.	Limit VDE to 20% opacity; stabilize soil	For storage piles with >5% silt content, 3ft high, >150 sq ft; work practices for stacking, loading, unloading, and when inactive; soil moisture content min 12%; or at least 70% min for optimum soil moisture content; 3 sided enclosures, at least equal to pile in length, same for height, porosity <50%	Maricopa County Rule 310 04/07/2004
Utilization of dust suppressants other than water when necessary; prewater; empty loader bucket slowly	Prevent wind erosion from piles; stabilize condition where equip and vehicles op	Bulk material handling for stacking, loading, and unloading; for haul trucks and areas where equipment op	Maricopa County Rule 310 04/07/2004

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Table 9-6 summarizes the compliance tools that are applicable to wind erosion from material storage piles.

Table 9-6. Compliance Tools for Storage Pile Wind Erosion

Record keeping	Site inspection/monitoring
Site map; work practices, including pile formation and removal times (throughputs); locations, sizes, and shapes of storage piles; moisture and silt contents of pile surface material; location/heights/densities of vegetation or other wind breaks, including maintenance times; dust suppression equipment and maintenance records; frequencies, amounts, times, and rates of watering or dust suppressant application; meteorological log.	Sampling and analysis of storage pile surface material for silt and moisture contents; observation of pile formation and removal, including wet suppression systems; observation of vehicle/ equipment operation and disturbance areas; inspection of wind sheltering including enclosures; real-time portable monitoring of PM; observation of dust plume opacity exceeding a standard.

9.7 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for fugitive dust originating from storage pile wind erosion. A sample cost-effectiveness calculation is presented below for a specific control measure (3-sided enclosure) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous control measure for storage pile wind erosion, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Storage Pile Wind Erosion

Step 1. Determine source activity and control application parameters.

Frequency of disturbance (days/yr)	365
Height of pile (m)	11
Base diameter (m)	29.2
Total surface area (m^2)	838
Portion of pile exposed to high winds (%)	12
Surface area exposed to high winds (m^2)	101
Threshold friction velocity u^*_t (m/s)	0.85

Control Measure	3-sided enclosure
Economic Life of Control System (yr)	10
Control Efficiency (%)	74.7
Reference for Control Efficiency	Sierra Research, 2003[13]

The pile size, source activity parameters and control measure parameters are assumed values for illustrative purposes. A 3-sided enclosure has been chosen as the applied control measure. The control efficiency is provided by Sierra Research.[13]

The pile surface area within each surface wind speed range (see AP-42, Section 13.2.5) is as follows:

Surface areas within each wind speed range			
Area ID	u_s / u_r	%	Pile surface Area (m^2)
A	0.9	12	101
B	0.6	48	402
C	0.2	40	335
Total Area			838

Step 2. Obtain PM10 Emission Factor.

The PM10 emission factor is obtained from AP-42: PM10 EF = $0.5 \sum_{i=1}^{N} P_i$

P—erosion potential (g/m^2)	$P = 58 (u^*-u^*_t)^2 + 25 (u^*-u^*_t)$
	$P = 0$ for $u^* \leq u_t^*$

Step 3. Calculate Uncontrolled PM Emissions. The PM10 emission factor (given in Step 2) is applied to each day for which the peak wind exceeds the threshold velocity for wind erosion. The following monthly climatic data are used for illustrative purposes and are assumed to apply to each month of the year.

Monthly erosion potential (P)					
	Peak wind (u^+_{10})		$u^+_{s\ (m/s)}$		
Day of month	mph	m/s	Area C u_s / u_r: 0.2	Area B u_s / u_r: 0.6	Area A u_s / u_r: 0.9
6	29	13.0	2.59	7.78	11.67
7	30	13.4	2.68	8.05	12.07
11	38	17.0	3.40	10.19	15.29
22	25	11.2	2.24	6.71	10.06
28	45	20.1	4.02	12.07	18.10

Monthly erosion potential (P)[a]						
Day of month	u* (m/s)			P (g/m^2)		
	Area C	Area B	Area A	Area C	Area B	Area A
6	0.26	0.78	1.17	0	0	13.74
7	0.27	0.80	1.21	0	0	16.32
11	0.34	1.02	1.53	0	5.89	43.70
22	0.22	0.67	1.01	0	0	5.30
28	0.40	1.21	1.81	0	16.32	77.52
			Sum of P (g/m^2)	0	22.21	156.57
			Area (m^2)	335	402	101
			Monthly PM10 emissions (g)[b]	0	4,464	7,907

[a] Assumed to apply to 12 months of the year.

[b] Monthly PM10 emissions = 0.5 times monthly erosion potential times surface area for each area of the pile.

The annual PM10 emissions in units of tons for each section of the pile is equal to 12 times the monthly PM10 emissions for each section of the pile divided by 454 g/lb and 2,000 lb/ton as follows:

Annual PM10 emissions for Area A = (12 x 7,907) / (454 x 2,000) = 0.104 tons
Annual PM10 emissions for Area B = (12 x 4,464) / (454 x 2,000) = 0.059 tons
Annual PM10 emissions for Area C = 0 tons
Annual PM10 emissions for storage pile = 0.104 + 0.059 + 0 = 0.163 tons

Annual PM2.5 Emissions = 0.15 x PM10 Emissions[11] = 0.15 x 0.163 = 0.025 tons

Step 4. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) are equal to the uncontrolled emissions (calculated above in Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency)

For this example we have selected a 3-sided enclosure as our control measure with a control efficiency of 74.7% Thus, the annual controlled PM10 and PM2.5 emissions estimates are calculated to be:

Annual Controlled PM10 emissions = (0.163 tons/yr) x (1 – 0.747) = 0.041 tons
Annual Controlled PM2.5 emissions = (0.025 tons/yr) x (1 – 0.747) = 0.006 tons

Step 5. Determine Annual Cost to Control PM Emissions.

Capital costs ($)	2,000
Annual Operating/Maintenance costs ($)	400
Annual Interest Rate	3%
Capital Recovery Factor	0.1172
Annualized Cost ($/yr)	634

The Capital costs, Annual Operating/Maintenance (O & M) costs and Annual Interest Rate (AIR) are assumed values for illustrative purposes.

The Capital Recovery Factor (CRF) is calculated as follows:

Capital Recovery Factor = AIR x (1 + AIR) $^{\text{Economic life}}$ / (1 + AIR)$^{\text{Economic life}}$ – 1

Capital Recovery Factor = 3% x (1 + 3%)^{10} / (1 + 3%)^{10} – 1 = 0.1172

The Annualized Cost is calculated by adding the product of the Capital Recovery Factor and the Capital costs to the annual O & M costs as follows:

Annualized Cost = (CRF x Capital costs) + O & M costs
Annualized Cost = (0.1172 x 2,000) + $400 = $634

Step 6. Calculate Cost Effectiveness. Cost effectiveness is calculated by dividing the annualized cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions:

Cost effectiveness = Annualized Cost/(Uncontrolled emissions – Controlled emissions)

Cost effectiveness for PM10 emissions = $634 / (0.163 – 0.041) = $5,195/ton
Cost effectiveness for PM2.5 emissions = $634 / (0.025 – 0.006) = $34,635/ton

9.8 References

1. Cowherd, C. Jr., 1983. *A New Approach to Estimating Wind Generated Emissions from Coal Storage Piles,* paper presented at the APCA Specialty Conference on Fugitive Dust Issues in the Coal Use Cycle, Pittsburgh, PA, April.

2. Axtell, K., Cowherd, C. Jr., 1984. *Improved Emission Factors for Fugitive Dust from Surface Coal Mining Sources*, EPA-600/7-84-048, U.S. EPA, Cincinnati, OH, March.

3. Muleski, G.E., 1985. *Coal Yard Wind Erosion Measurement*, Midwest Research Institute, Kansas City, MO, March 1985.

4. MRI, 1988. *Update of Fugitive Dust Emissions Factors in AP-42 Section 11.2-Wind Erosion*, Midwest Research Institute, Kansas City, MO.

5. Chepil, W.S., 1952. *Improved Rotary Sieve for Measuring State and Stability of Dry Soil Structure,* Soil Science Society of America Proceedings, *16*:113-117.

6. Gillette, D.A., *et al.*, 1980. *Threshold Velocities for Input of Soil Particles into the Air by Desert Soils*, Journal Of Geophysical Research, *85*(C10):5621-5630.

7. Local Climatological Data, National Climatic Center, Asheville, NC.

8. Changery, M.J., 1978. *National Wind Data Index Final Report*, HCO/T1041-01 UC-60, National Climatic Center, Asheville, NC, December.

9. Billings-Stunder, .J.B., Arya, S.P.S., 1988. *Windbreak Effectiveness for Storage Pile Fugitive Dust Control: A Wind Tunnel Study*, J. APCA, *38*:135-143.

10. Cowherd, C. Jr., *et al.*, 1988. *Control of Open Fugitive Dust Sources*, EPA 450/3-88-008, Research Triangle Park, NC, September.

11. MRI, 2006. *Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Emission Factors*, report prepared for the WRAP by Midwest Research Institute, Project No. 110397, February 1.

12. USEPA, 1989. Air/Superfund National Technical Guidance Study Series; Volume III – Estimation of Air Emissions from Cleanup Activities at Superfund Sites, Interim final report EPA-450/1-89-003, January.

13. Sierra Research, 2003. *Final BACM Technological and Economic Feasibility Analysis,* report prepared for the San Joaquin Valley Unified Air Pollution Control District, March 21.

14. Fitz, D., K. Bumiller, 2000. *Evaluation of Watering to Control Dust in High Winds,* J.AWMA, April.

Chapter 10. Agricultural Harvesting

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10.1 Characterization of Source Emissions

Harvesting emissions are generated by three different operations: crop handling by the harvest machine, loading of the harvested crop into trailers or trucks, and transport by trailers or trucks in the field. Emissions from these operations are in the form of solid particulates composed mainly of raw plant material and soil dust that is entrained into the air. These emissions may simply be due to the vehicles traveling over the soil, or via the mechanical processing of the plant material and underlying soil, or, as in the case of almonds, via the actual blowing or sweeping of the crop to remove waste materials and position it for pickup. Defoliants and/or desiccants are used on some crops several weeks before harvesting which can produce PM emissions from the drifting of these chemicals equal to about 1% of the product applied on the crop.[1]

10.2 EPA's Emission Estimation Methodology

Section 9 of EPA's Compilation of Air Pollutant Emission Factors (AP-42) addresses emission factors for mechanical harvesting of three different crops (cotton, wheat and sorghum). This section of AP-42 was last updated in February 1980. However, it does not list TSP or PM10 emission factors for agricultural harvesting. Instead it lists PM7 emission factors for the three crops expressed in units of pounds per square mile for crop handling by the harvest machine, loading of the harvested crop into trailers or trucks, and transport by trailers or trucks in the field. The sum of the PM7 emission factor for these three separate operations total 0.0086 lb/acre for mechanical picking of cotton, 0.041 lb/acre for mechanical stripping of cotton, 0.0027 lb/acre for wheat, and 0.012 lb/acre for sorghum.[1] The PM7 emission factors for harvesting cotton are based on an average machine speed of 3 mph for pickers and 5 mph for strippers, a basket capacity of 240 lb, a trailer capacity of 6 baskets, a lint cotton yield of 1.17 bales/acre for pickers and 0.77 bales/acre for strippers, and a transport speed of 10 mph. The weighted average stripping factors assumes that 2% of all strippers are 4-row models with baskets and, of the remainder, 40% are 2-row models pulling trailers and 60% are 2-row models with mounted baskets. The PM7 emission factors for harvesting wheat and sorghum are based on an average combine speed of 7.5 mph, a combine swath width of 20 feet, a field transport speed of 10 mph, a truck loading time of 6 minutes, a truck capacity of 13 acres for wheat and 7 acres for sorghum, and a filled truck travel time of 2 minutes per load. These AP-42 PM7 emission factors developed more than 25 years ago for the entire US are much lower than CARB's PM10 emission factors developed in early 2003 for California.

10.3 CARB's Emission Estimation Methodology

This section was adapted from Section 7.5 of CARB's Emission Inventory Methodology. Section 7.5 was last updated in January 2003.

The California Air Resources Board (CARB) has published a PM10 emission estimation method for fugitive dust emissions originating from agricultural harvesting

operations.[2] Unlike the soil preparations activities (e.g., disking, tilling, etc.), harvest operations tend to be fairly unique for each crop. Because of this, harvest emission factors combine all of the operations that go into harvesting a commodity into a single factor that includes emissions from all of the relevant operations. PM10 emission factors have been measured in California by UC Davis for harvesting cotton, almonds and wheat.[3] These emission factors are shown in Table10-1. Using these emission factors as a baseline, harvesting emission factors were assigned to other major crops grown California crops in consultation with agricultural experts. These PM10 emission factors are also included in Table 10-1.

Table 10-1. Harvesting PM10 Emission Factors

Crop	PM 10 Emission Factor (lbs/acre)
Almonds	40.8
Corn	1.7[a]
Cotton	3.4
Fruit trees	0.085[b]
Onions	1.7[a]
Potatoes	1.7[a]
Sugar beets	1.7[a]
Tomatoes	0.17[c]
Vine crops	0.17[c]
Walnuts	40.8[d]
Wheat	5.8

[a] EF = 50% EF for cotton
[b] EF = 2.5% EF for cotton
[c] EF = 5% EF for cotton
[d] EF = same EF as almonds

UC Davis has recently completed a study measuring PM10 emissions from almond harvesting that indicates that CARB's PM10 emission factor for almond harvesting may be over-estimated by 62%.[4] The complete list of harvesting emission factors assigned to over 200 crops is presented in Attachment 10-1 at the end of this chapter. The acreage data used for estimating harvest emissions for different crops are available from each state's Department of Food and Agriculture as well as from individual county agricultural commissioner reports.

Crop Calendar and Temporal Activity. Harvesting is performed at very specific times each year, so crop calendar data, which tells when harvest activities occur, is important. Temporal activity for harvesting is derived by summing, for each county, the monthly emissions from all crops. For each crop, the monthly emissions are calculated based on its monthly profile, which reflects the percentage of harvesting activities occurring in that month. An example of the monthly harvesting profile for almonds, cotton, and wheat is shown in Table 10-2. Because the mix of crops varies by county, composite temporal profiles combining all of the other county crops vary by county. An example of a composite harvesting profile by month for Fresno County, showing the combined temporal profile for all of the harvesting activities in the county, is shown in Table 10-3.

Table 10-2. Sample Monthly Harvesting Profile of Crops

Crops	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Almonds	0	0	0	0	0	0	0	0	50	50	0	0
Cotton	0	0	0	0	0	0	0	0	0	50	50	0
Wheat	0	0	0	0	0	50	50	0	0	0	0	0

Table 10-3. Sample County Harvesting Profile Composite

County	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Fresno	0.1	0.1	0.2	0.2	0.1	5.6	5.9	0.8	30.7	42.8	13.6	0.1

Assumptions. The CARB methodology is subject to the following assumptions:

1. The current harvest emission factors assume that for each crop, harvesting produces the same level emissions under all conditions for all equipment.
2. The emission factors for crops other than almonds, cotton, and wheat were assigned to reflect the relative geologic PM10 generation potential of various harvest practices.
3. Crop calendar data collected for San Joaquin Valley crops and practices were extrapolated to the same crops in the remainder of California.

PM2.5 Emission Factors. In July 2006, EPA revised the PM2.5/PM10 ratios listed in AP-42 for fugitive dust resulting from different fugitive dust source categories based on MRI's controlled laboratory experiments conducted for WRAP in 2005.[5] The revised PM2.5/PM10 ratios range from 0.1 for unpaved roads to 0.15 for paved roads, wind erosion, and transfer of aggregate material. CARB is considering adopting a PM2.5/PM10 ratio of 0.15 for both agricultural tilling and agricultural tilling based on MRI's findings.[6]

10.4 Demonstrated Control Techniques

Soil dust emissions from field transport can be reduced by lowering vehicle speed. Also, the use of terraces, contouring, and strip cropping to inhibit soil erosion will suppress the entrainment of harvested crop fragments in the wind. Shelterbelts, positioned perpendicular to the prevailing wind, will lower emissions by reducing the wind velocity across the field. By minimizing tillage and avoiding residue burning, the soil will remain consolidated and less prone to disturbance from transport activities.

Table 10-4 summarizes tested control measures and reported control efficiencies for measures that reduce the generation of fugitive dust from agricultural harvesting.[7-9] A list of control measures for agricultural harvesting operations is available from the California Air Pollution Control Officers' Association's (CAPCOA) agricultural clearing house website (http://capcoa.org/ag_clearinghouse.htm). The list of control measures for harvesting field and orchard crops include: the use of balers to harvest crops that are traditionally harvested by chopping, new drying techniques for dried fruit, increasing equipment size to reduce the number of passes, fallowing land, green chop (i.e., harvesting a forage crop without allowing it to dry in the field), hand harvesting, night harvesting, switch to a crop that requires no waste/residue burning, applying a light

amount of water or other stabilizing material to the soil prior to harvest, packing commodities in an enclosed area, and utilizing a shuttle system to haul multiple trailers per trip.

Table 10-4. Control Efficiencies for Control Measures for Harvesting[7-9]

Control Measure	PM10 Control Efficiency	References / Comments
Equipment modification	50%	MRI, 1981. Control efficiency is for electrostatically charged fine-mist water spray.
Land set-aside/fallowing	100%	SJVAPCD, 2003.
Limited activity during high winds	5 - 70%	URS, 2001. Emissions reduction depends on wind speed.
Night farming	10%	SJVAPCD, 2003. Harvest when humidity and soil moisture is higher than during day.
New techniques for drying fruit Continuous tray Dried on vine (DOV)	 25% 60%	SJVAPCD, 2003.
Precision farming	8%	SJVAPCD, 2003. Use of GPS system.
Reduced harvest activity	29 – 71 %	URS, 2001. Applicable to cotton, alfalfa, hay.
Soil moisture monitoring	30%	URS, 2001.

10.5 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. However, most air quality districts currently exempt agricultural operations from controlling fugitive dust. Air quality districts that regulate fugitive dust emissions from agricultural harvesting include Clark County, NV and several districts in California such as the Imperial County APCD, the San Joaquin Valley APCD and the South Coast AQMD. Imperial County APCD prohibits fugitive dust emissions from farming activities for farms over 40 acres. The San Joaquin Valley APCD and the South Coast AQMD prohibit fugitive dust emissions for the larger farms defined as farms with areas where the combined disturbed surface area within one continuous property line and not separated by a paved public road is greater than 10 acres. Example regulatory formats downloaded from the Internet are presented in Table 10-5. The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- San Joaquin Valley APCD, CA: valleyair.org/SJV_main.asp
- South Coast AQMD, CA: aqmd.gov/rules
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: www.maricopa.gov/aq

CAPCOA's agricultural clearing house website (http://capcoa.org/ag_clearinghouse.htm) provides links to rules of different air quality agencies that regulate fugitive dust emissions from agricultural operations.

Table 10-5. Example Regulatory Formats for Harvesting

Control Measure	Agency
Any person engaged in agricultural operations shall take all reasonable precautions to abate fugitive dust from becoming airborne from such activities.	Clark County Reg. 41 7/01/04
Limit fugitive dust from off-field agricultural sources such as unpaved roads with more than 75 trips/day and bulk materials handling by requiring producers to develop and implement a Fugitive Dust Management Plan with district approved control methods.	SJVAPCD Rule 8081 11/15/01
Cease activities when wind speeds are greater than 25 mph.	SCAQMD Rule 403.1 4/02/04

10.6 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations. An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Table 10-6 summarizes the compliance tools that are applicable for harvesting.

Table 10-6. Compliance Tools for Harvesting

Record keeping	Site inspection/monitoring
Maintain daily records to document the specific dust control options taken; maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request.	Observation of dust plumes during periods of agricultural harvesting; observation of dust plume opacity (visible emissions) exceeding a standard; observation of high winds (e.g., >25 mph).

10.7 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for agricultural harvesting. A sample cost-effectiveness calculation is presented below for a specific control measure (precision farming utilizing a GPS system) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous control measure for agricultural harvesting, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Agricultural Harvesting

Step 1. Determine source activity and control application parameters.

Field size (acres)	320
Crop	Cotton
Frequency of operations per year	2 (picking & stalk cutting)
Control Measure	Precision farming
Control application/frequency	Reduce overlap of passes by 8%
Economic Life of Control System (yr)	5
Control Efficiency	8%

Precision farming utilizing a GPS system has been chosen as the applied control measure. The field size, frequency of operations, and control application/frequency are assumed values for illustrative purposes. The economic life of the control is determined from industrial records. The control efficiency of 8% is based on the proportional reduction in passes to harvest the cotton and cut the stalks after harvesting the cotton (SJVAPCD, 2003).[8]

Step 2. PM10 Emission Factor.
The PM10 emission factor for harvesting cotton includes the emissions from picking the cotton plus the emissions from cutting the stalks after picking the cotton. The PM10 emission factor for each operation is 1.7 lb/acre.[2]

Step 3. Calculate Uncontrolled PM Emissions. The PM10 emission factor, EF, (given in Step 2) is multiplied by the field size and the frequency of operations (both under activity data) and then divided by 2,000 lbs to compute the annual PM10 emissions in tons per year, as follows:

Annual PM10 emissions = (EF x Field Size x Frequency of Ops) / 2,000

- Annual PM10 Emissions = (1.7 x 320 x 2) / 2,000 = 0.544 tons

Annual PM2.5 emissions = (PM2.5/PM10) x PM10 emissions
Assume PM2.5/PM10 ratio for agricultural harvesting is 0.15 (MRI, 2006).[6]
Annual PM2.5 emissions = 0.15 x PM10 emissions

- Annual PM2.5 Emissions = (0.15 x 0.544 tons) = 0.0816 tons

Step 4. Calculate Controlled PM Emissions. The uncontrolled emissions (calculated in Step 3) are multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency)

For this example, we have selected precision farming as our control measure. Based on a control efficiency estimate of 8%, the annual controlled PM emissions are calculated to be:

Annual Controlled PM10 emissions = (0.544 tons) x (1 – 0.08) = 0.500 tons
Annual Controlled PM2.5 emissions = (0.0816 tons) x (1 – 0.08) = 0.075 tons

Step 5. Determine Annual Cost to Control PM Emissions.

The Annualized Cost of control is calculated by subtracting the cost savings from reducing the overlap of harvesting passes by 8% from the annualized cost of purchasing the GPS system.

Assuming that the cost of harvesting is equivalent to that of tilling, namely $10/acre (WSU, 1998[10]), the cost savings using GPS precision farming is $512 (i.e., 0.08 x 320 acres x $10/acre x 2 harvesting passes [i.e., one pass to harvest the cotton and a second pass to cut the stalks]).

GPS systems range in cost from $200 to $5,000 and have a lifetime of approximately five years (SJVAPCD, 2003[8]). Using an estimate of $1,000 and an economic life (EL) of five years for the GPS system together with an annual interest rate (AIR) of 5%, the annualized cost of the GPS system is calculated by adding the product of the Capital Recovery Factor (CRF) and the capital costs to the annual operating and maintenance costs, which for this example are assumed to be $200 per year.

The Capital Recovery Factor (CRF) is calculated as follows:

$$CRF = AIR \times (1+AIR)^{EL} / [(1+AIR)^{EL} - 1]$$

$$CRF = 5\% \times (1+ 5\%)^5 / [(1+ 5\%)^5 - 1] = 0.231$$

Annualized capital cost = CRF x capital cost = 0.231 x $1,000 = $231

Annual cost of GPS system = Annualized capital costs + Annual O & M costs

Annual cost of GPS system = $231 + $200 = $431

Annualized cost of control measure = Annual cost of GPS system minus the cost savings from reducing the overlap of harvesting passes

Annualized Cost = $431 - $512 = -$81

The annualized cost is negative and represents a net savings.

Step 6. Calculate Cost-effectiveness. Cost-effectiveness is calculated by dividing the annualized cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions:

Cost-effectiveness = Annualized Cost/ (Uncontrolled emissions – Controlled emissions)

Cost-effectiveness for PM10 emissions = -$81 / (0.544 – 0.500) = -$1,862/ton
Cost-effectiveness for PM2.5 emissions = -$81 / (0.0816 – 0.075) = -$12,412/ton

The negative cost-effectiveness values indicate cost savings.

10.8 References

1. USEPA, 2006. AP-42: Compilation of Air Pollutant Emission Factors Volume I: Stationary Point and Area Sources.

2. California Air Resources Board, 2003. Emission Inventory Procedural Manual Volume III: Methods for Assessing Area Source Emissions, Sacramento, CA, January.

3. Flocchini, R.G., James, T.A., et al., 2001. *Sources and Sinks of PM10 in the San Joaquin Valley,* Interim Report prepared for the United States Department of Agriculture Special Research Grants Program, August 10.

4. Flocchini, R.G., 2006. *Recommended PM10 Emission Factors for Almond Harvesting,* White Paper prepared for the San Joaquin Valley APCD by UC Davis, May 22.

5. MRI, 2006. *Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Emission Factors*, Final Report prepared for the WRAP by Midwest Research Institute, Project No. 110397, February 1.

6. CARB, 2006. Private communication from Patrick Gaffney, CARB Emission Inventory Branch PTSD, May 2.

7. MRI, 1981. *The Role of Agricultural Practices in Fugitive Dust Emissions,* Final Report prepared for the California Air Resources Board by Midwest Research Institute, April 17.

8. SJVAPCD, 2003. *Conservation Management Practices Program for the San Joaquin Valley*, Final Report prepared by the San Joaquin Valley Air Pollution Control District, February 5.

9. URS, 2001. *Technical Support Document for Quantification of Agricultural Best Management Practices*, Final Report prepared for Maricopa County, Arizona Department of Environmental Quality, June 8.

10. WSU, 1998. *Farming with the Wind*, Washington State University College of Agriculture and Home Economics Miscellaneous Publication N.MISC0208, December.

10.9 Attachment 10-1. PM10 Emission Factors for Harvesting Crops in CA

Crop Description	Crop Profile	Assumption	PM10 Emission Factor (lb/acre)
ALMOND HULLS	Almonds	Almonds/1	40.77
ALMONDS, ALL	Almonds	Almonds/1	40.77
ANISE (FENNEL)	Lettuce	Cotton/2	1.68
APPLES, ALL	Citrus	Cotton/40	0.08
APRICOTS, ALL	Citrus	Cotton/40	0.08
ARTICHOKES	Melon	Cotton/40	0.08
ASPARAGUS, FRESH MKT	Melon	Cotton/2	1.68
ASPARAGUS, PROC	Melon	Cotton/2	1.68
ASPARAGUS, UNSPECIFIED	Melon	Cotton/2	1.68
AVOCADOS, ALL	Citrus	Cotton/40	0.08
BARLEY, FEED	Wheat	Wheat/1	5.8
BARLEY, MALTING	Wheat	Wheat/1	5.8
BARLEY, UNSPECIFIED	Wheat	Wheat/1	5.8
BEANS FRESH UNSPECIFIED	Dry Beans	Cotton/20	0.17
BEANS, BLACKEYE (PEAS)	Dry Beans	Cotton/2	1.68
BEANS, FAVA	Dry Beans	Cotton/2	1.68
BEANS, GARBANZO	Garbanzo	Cotton/2	1.68
BEANS, GREEN LIMAS	Dry Beans	Cotton/2	1.68
BEANS, LIMAS, BABY DRY	Dry Beans	Cotton/2	1.68
BEANS, LIMAS, LG. DRY	Dry Beans	Cotton/2	1.68
BEANS, PINK	Dry Beans	Cotton/2	1.68
BEANS, RED KIDNEY	Dry Beans	Cotton/2	1.68
BEANS, SNAP FR MKT	Dry Beans	Cotton/20	0.17
BEANS, SNAP PROC	Dry Beans	Cotton/20	0.17
BEANS, UNSPECIFIED SNAP	Dry Beans	Cotton/20	0.17
BEANS,UNSPEC. DRY EDIBLE	Dry Beans	Cotton/2	1.68
BEETS, GARDEN	Sugar Beets	Cotton/2	1.68
BERRIES, BLACKBERRIES	Grapes-Table	Cotton/40	0.08
BERRIES, BOYSENBERRIES	Grapes-Table	Cotton/40	0.08
BERRIES, BUSH, UNSPECIFIED	Grapes-Table	Cotton/40	0.08
BERRIES, LOGANBERRIES	Grapes-Table	Cotton/40	0.08
BERRIES, RASPBERRIES	Grapes-Table	Cotton/40	0.08
BROCCOLI, FR MKT	Vegetables	Cotton/40	0.08
BROCCOLI, PROC	Vegetables	Cotton/40	0.08
BROCCOLI, UNSPECIFIED	Vegetables	Cotton/40	0.08
BROCCOLI,FOOD SERV	Vegetables	Cotton/40	0.08
BRUSSELS SPROUTS	Melon	Cotton/40	0.08
CABBAGE, CH. & SPECIALTY	Lettuce	Cotton/40	0.08
CABBAGE, HEAD	Lettuce	Cotton/40	0.08
CARROTS, FOOD SERV	Sugar Beets	Cotton/20	0.17
CARROTS, FR MKT	Sugar Beets	Cotton/20	0.17
CARROTS, PROC	Sugar Beets	Cotton/20	0.17
CARROTS, UNSPECIFIED	Sugar Beets	Cotton/20	0.17
CAULIFLOWER, FOOD SERV	Vegetables	Cotton/40	0.08

Crop Description	Crop Profile	Assumption	PM10 Emission Factor (lb/acre)
CAULIFLOWER, FR MKT	Vegetables	Cotton/40	0.08
CAULIFLOWER, PROC	Vegetables	Cotton/40	0.08
CAULIFLOWER, UNSPECIFIED	Vegetables	Cotton/40	0.08
CELERY, FOOD SERV	Lettuce	Cotton/40	0.08
CELERY, FR MKT	Lettuce	Cotton/40	0.08
CELERY, PROC	Lettuce	Cotton/40	0.08
CELERY, UNSPECIFIED	Lettuce	Cotton/40	0.08
CHERIMOYAS	Citrus	Cotton/40	0.08
CHERRIES, SWEET	Citrus	Cotton/40	0.08
CHESTNUTS	Almonds	Almonds/10	4.08
CHIVES	Lettuce	Cotton/40	0.08
CILANTRO	Lettuce	Cotton/40	0.08
CITRUS, MISC BY-PROD	Citrus	Cotton/40	0.08
CITRUS, UNSPECIFIED	Citrus	Cotton/40	0.08
CLOVER, UNSPECIFIED SEED	Alfalfa	Alfalfa/1	0
COLLARD GREENS	Lettuce	Cotton/40	0.08
CORN FOR GRAIN	Corn	Cotton/2	1.68
CORN FOR SILAGE	Corn	Cotton/20	0.17
CORN, SWEET ALL	Corn	Cotton/40	0.08
CORN, WHITE	Corn	Cotton/40	0.08
COTTON LINT, PIMA	Cotton	Cotton/1	3.37
COTTON LINT, UNSPEC	Cotton	Cotton/1	3.37
COTTON LINT, UPLAND	Cotton	Cotton/1	3.37
COTTONSEED	Cotton	Cotton/1	3.37
CUCUMBERS	Vegetables	Cotton/40	0.08
CUCUMBERS, GREENHOUSE	No Land Prep	Zero/1	0
DATES	Citrus	Almonds/20	2.04
EGGPLANT, ALL	Vegetables	Cotton/40	0.08
ENDIVE, ALL	Lettuce	Cotton/40	0.08
ESCAROLE, ALL	Lettuce	Cotton/40	0.08
FIELD CROP BY PRODUCTS	Cotton	Cotton/20	0.17
FIELD CROPS, UNSPEC.	Corn	Cotton/20	0.17
FIGS, DRIED	Citrus	Almonds/20	2.04
FOOD GRAINS, MISC	Corn	Cotton/2	1.68
FRUITS & NUTS, UNSPEC.	Citrus	Cotton/40	0.08
GARLIC, ALL	Garlic	Cotton/2	1.68
GRAPEFRUIT, ALL	Citrus	Cotton/40	0.08
GRAPES, RAISIN	Grapes-Raisin	Cotton/20	0.17
GRAPES, TABLE	Grapes-Table	Cotton/20	0.17
GRAPES, UNSPECIFIED	Grapes-Wine	Cotton/20	0.17
GRAPES, WINE	Grapes-Wine	Cotton/20	0.17
GREENS, TURNIP & MUSTARD	Lettuce	Cotton/40	0.08
GUAVAS	Citrus	Cotton/40	0.08
HAY, ALFALFA	Alfalfa	Alfalfa/1	0
HAY, GRAIN	Alfalfa	Cotton/2	1.68
HAY, GREEN CHOP	Alfalfa	Alfalfa/1	0

Crop Description	Crop Profile	Assumption	PM10 Emission Factor (lb/acre)
HAY, OTHER UNSPECIFIED	Alfalfa	Cotton/2	1.68
HAY, SUDAN	Alfalfa	Alfalfa/1	0
HAY, WILD	Alfalfa	Cotton/2	1.68
HORSERADISH	Onions	Cotton/40	0.08
JOJOBA	Melon	Cotton/40	0.08
KALE	Lettuce	Cotton/40	0.08
KIWIFRUIT	Citrus	Cotton/40	0.08
KOHLRABI	Lettuce	Cotton/40	0.08
KUMQUATS	Citrus	Cotton/40	0.08
LEEKS	Onions	Cotton/40	0.08
LEMONS, ALL	Citrus	Cotton/40	0.08
LETTUCE, BULK SALAD PRODS.	Lettuce	Cotton/40	0.08
LETTUCE, HEAD	Lettuce	Cotton/40	0.08
LETTUCE, LEAF	Lettuce	Cotton/40	0.08
LETTUCE, ROMAINE	Lettuce	Cotton/40	0.08
LETTUCE, UNSPECIFIED	Lettuce	Cotton/40	0.08
LIMA BEANS, UNSPECIFIED	Dry Beans	Cotton/2	1.68
LIMES, ALL	Citrus	Cotton/40	0.08
MACADAMIA NUT	Almonds	Almonds/10	4.08
MELON, CANTALOUPE	Melon	Cotton/40	0.08
MELON, HONEYDEW	Melon	Cotton/40	0.08
MELON, UNSPECIFIED	Melon	Cotton/40	0.08
MELON, WATER MELONS	Melon	Cotton/40	0.08
MUSHROOMS	No Land Prep	Zero/1	0
MUSTARD	Lettuce	Cotton/40	0.08
NECTARINES	Citrus	Cotton/40	0.08
NURSERY TURF	No Land Prep	Zero/1	0
OATS FOR GRAIN	Wheat	Wheat/1	5.8
OKRA	Lettuce	Cotton/40	0.08
OLIVES	Citrus	Cotton/40	0.08
ONIONS	Onions	Cotton/2	1.68
ONIONS, GREEN & SHALLOTS	Onions	Cotton/40	0.08
ORANGES, NAVEL	Citrus	Cotton/40	0.08
ORANGES, UNSPECIFIED	Citrus	Cotton/40	0.08
ORANGES, VALENCIAS	Citrus	Cotton/40	0.08
ORCHARD BIOMASS	Almonds	Cotton/40	0.08
PARSLEY	Lettuce	Cotton/40	0.08
PASTURE, IRRIGATED	No Land Prep	Zero/1	0
PASTURE, MISC. FORAGE	No Land Prep	Zero/1	0
PASTURE, RANGE	No Land Prep	Zero/1	0
PEACHES, CLINGSTONE	Citrus	Cotton/40	0.08
PEACHES, FREESTONE	Citrus	Cotton/40	0.08
PEACHES, UNSPECIFIED	Citrus	Cotton/40	0.08
PEANUTS, ALL	Safflower	Cotton/2	1.68
PEARS, ASIAN	Citrus	Cotton/40	0.08
PEARS, BARLETT	Citrus	Cotton/40	0.08

Crop Description	Crop Profile	Assumption	PM10 Emission Factor (lb/acre)
PEARS, UNSPECIFIED	Citrus	Cotton/40	0.08
PEAS, DRY EDIBLE	Dry Beans	Cotton/20	0.17
PEAS, EDIBLE POD (SNOW)	Dry Beans	Cotton/20	0.17
PEAS, GREEN, PROCESSING	Dry Beans	Cotton/20	0.17
PEAS, GREEN, UNSPECIFIED	Dry Beans	Cotton/20	0.17
PECANS	Almonds	Almonds/10	4.08
PEPPERS, BELL	Tomatoes	Cotton/40	0.08
PEPPERS, CHILI, HOT	Tomatoes	Cotton/40	0.08
PERSIMMONS	Citrus	Cotton/40	0.08
PISTACHIOS	Almonds	Almonds/10	4.08
PLUMCOTS	Citrus	Cotton/40	0.08
PLUMS	Citrus	Cotton/40	0.08
POMEGRANATES	Citrus	Cotton/40	0.08
POTATOES SEED	Sugar Beets	Cotton/2	1.68
POTATOES, IRISH ALL	Sugar Beets	Cotton/2	1.68
PRUNES, DRIED	Citrus	Cotton/40	0.08
PUMPKINS	Melon	Cotton/20	0.17
QUINCE	Citrus	Cotton/40	0.08
RADICCHIO	Lettuce	Cotton/40	0.08
RADISHES	Sugar Beets	Cotton/40	0.08
RAPINI	Sugar Beets	Cotton/40	0.08
RHUBARB	Lettuce	Cotton/40	0.08
RICE, FOR MILLING	Rice	Cotton/2	1.68
RICE, WILD	Rice	Cotton/2	1.68
RUTABAGAS	Sugar Beets	Cotton/2	1.68
RYE FOR GRAIN	Wheat	Wheat/1	5.8
SAFFLOWER	Safflower	Wheat/1	5.8
SALAD GREENS NEC	Lettuce	Cotton/40	0.08
SEED BARLEY	Wheat	Wheat/1	5.8
SEED BEANS	Dry Beans	Cotton/2	1.68
SEED OATS	Wheat	Wheat/1	5.8
SEED PEAS	Dry Beans	Cotton/20	0.17
SEED RICE	Rice	Cotton/2	1.68
SEED RYE	Wheat	Wheat/1	5.8
SEED WHEAT	Wheat	Wheat/1	5.8
SEED, ALFALFA	Alfalfa	Alfalfa/1	0
SEED, BERMUDA GRASS	Alfalfa	Alfalfa/1	0
SEED, COTTON FOR PLANTING	Cotton	Cotton/1	3.37
SEED, GRASS, UNSPECIFIED	Alfalfa	Alfalfa/1	0
SEED, MISC FIELD CROP	Corn	Cotton/20	0.17
SEED, OTHER (NO FLOWERS)	Alfalfa	Cotton/20	0.17
SEED, SAFFLOWER, PLANTING	Safflower	Wheat/1	5.8
SEED, SUDAN GRASS	Alfalfa	Alfalfa/1	0
SEED, VEG & VINECROP	Vegetables	Cotton/20	0.17
SILAGE	Wheat	Cotton/20	0.17
SORGHUM, GRAIN	Wheat	Wheat/1	5.8

Crop Description	Crop Profile	Assumption	PM10 Emission Factor (lb/acre)
SPICES AND HERBS	Lettuce	Cotton/40	0.08
SPINACH UNSPECIFIED	Lettuce	Cotton/40	0.08
SPINACH, FOOD SERV	Lettuce	Cotton/40	0.08
SPINACH, FR MKT	Lettuce	Cotton/40	0.08
SPINACH, PROC	Lettuce	Cotton/40	0.08
SPROUTS, ALFALFA & BEAN	Lettuce	Cotton/40	0.08
SQUASH	Melon	Cotton/20	0.17
STRAW	Alfalfa	Wheat/1	5.8
STRAWBERRIES, FRESH MKT	Melon	Cotton/40	0.08
STRAWBERRIES, PROC	Melon	Cotton/40	0.08
STRAWBERRIES, UNSPECIFIED	Melon	Cotton/40	0.08
SUGAR BEETS	Sugar Beets	Cotton/2	1.68
SUNFLOWER SEED	Corn	Wheat/1	5.8
SUNFLOWER SEED, PLANTING	Corn	Wheat/1	5.8
SWEET POTATOES	Sugar Beets	Cotton/2	1.68
SWISSCHARD	Lettuce	Cotton/40	0.08
TANGELOS	Citrus	Cotton/40	0.08
TANGERINES & MANDARINS	Citrus	Cotton/40	0.08
TOMATILLO	Tomatoes	Cotton/40	0.08
TOMATOES, CHERRY	Tomatoes	Cotton/40	0.08
TOMATOES, FRESH MARKET	Tomatoes	Cotton/40	0.08
TOMATOES, GREENHOUSE	No Land Prep	Zero/1	0
TOMATOES, PROCESSING	Tomatoes	Cotton/20	0.17
TOMATOES, UNSPECIFIED	Tomatoes	Cotton/20	0.17
TURNIPS, ALL	Sugar Beets	Cotton/2	1.68
VEGETABLES, BABY	Vegetables	Cotton/40	0.08
VEGETABLES, ORIENTAL, ALL	Vegetables	Cotton/40	0.08
VEGETABLES, UNSPECIFIED	Vegetables	Cotton/20	0.17
WALNUTS, BLACK	Almonds	Almonds/1	40.77
WALNUTS, ENGLISH	Almonds	Almonds/1	40.77
WHEAT ALL	Wheat	Wheat/1	5.8

Chapter 11. Mineral Products Industry

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11.1 Characterization of Source Emissions

This chapter of the handbook addresses fugitive dust emissions from mineral products industries that involve the production and processing of various ores, as discussed in Chapter 11 of AP-42 [1] In the mineral products industry, there are two major categories of emissions: ducted sources (those vented to the atmosphere through some type of stack, vent, or pipe), and fugitive sources (those not confined to ducts and vents but emitted directly from the source to the ambient air). Ducted emissions are usually collected and transported by an industrial ventilation system having one or more fans or air movers, eventually to be emitted to the atmosphere through some type of stack.

Many operations and processes are common to all mineral products industries, including extraction of aggregate materials from the earth, loading, unloading, conveying, crushing, screening, loadout, and storage. Other operations are restricted to specific industries. These include wet and dry fine milling or grinding, air classification, drying, calcining, mixing, and bagging. Sand and gravel is typically mined in a moist or wet condition such that negligible particulate emissions occur during the mining operation. Construction aggregate processing can produce large amounts of fugitive dust, which due to its generally larger particle sizes tends to settle out within the plant. Some of the individual operations such as wet crushing and grinding, washing, screening, and dredging take place with high moisture content (>4% by weight). Such wet processes do not generate appreciable particulate emissions. For those processing and manufacturing operations that are housed in enclosed buildings with the dust captured by a control device (e.g., product recovery cyclones, fabric filters, and wet scrubber/suppression systems), no uncontrolled fugitive dust emissions are emitted directly into the outdoor air.

The operations at a typical western surface coal mine include drilling and blasting, removal of the overburden with a dragline or shovel, loading trucks, bulldozing and grading, crushing, vehicle traffic, and storage of coal in active storage piles that are subject to wind erosion. All operations that involve movement of soil or coal, or exposure of erodible surfaces, generate some amount of fugitive dust. During mine reclamation, which proceeds continuously throughout the life of the mine, overburden spoils piles are smoothed and contoured by bulldozers. Topsoil is placed on the graded spoils, and the land is prepared for revegetation by furrowing and mulching. From the time an area is disturbed until the new vegetation emerges, all disturbed areas are subject to wind erosion.

11.2 Emission Estimation Methodology

This section was adapted from *EPA's documentation of methods used for the National Emission Inventory (NEI.*[2] and from Section 11, Mineral Products Industry, of EPA's *Compilation of Air Pollutant Emission Factors (AP-42).*[1] Many of the categories addressed in AP-42 have not been updated by the EPA since the mid to late 1990's.

This section addresses three different mineral categories: (a) metallic ores (b) non-metallic ores and rock, and (c) coal. Fugitive dust emission factors for mining and quarrying activities are based on EPA's methodology used for the annual National

Emission Inventory that includes emissions from extraction of the ore or rock from the earth but not processing activities.[2] Fugitive dust emission factors for processing activities are taken from AP-42 and represent average values based on a number of tests made under a variety of conditions such as material silt content, moisture content, and wind speed. As such, the actual uncontrolled emission factors will vary depending upon actual site conditions.

The EPA methodology used to develop the annual National Emission Inventory (NEI) for fugitive PM10 dust emissions from mining and quarrying operations utilizes the sum of the emissions from the mining of metallic and nonmetallic ores and coal as well as rock quarrying, as follows:

$$E = E_m + E_n + E_c \quad (1)$$

where, E = PM10 emissions from mining and quarrying operations
E_m = PM10 emissions from metallic ore mining operations
E_n = PM10 emissions from non-metallic ore mining and rock quarrying operations
E_c = PM10 emissions from coal mining operations

The NEI PM10 emissions estimate for mining and rock quarrying operations involving extraction of ore or rock from the earth include three specific activities: (1) overburden removal, (2) drilling and blasting, and (3) loading and unloading. Ore processing activities that involve transfer and conveyance operations, crushing and screening operations, storage, and travel on haul roads are not included in the NEI emissions estimate since EPA assumes that the dust emissions from these activities are well controlled. Uncontrolled particulate emission factors for ore processing activities are presented in the subsections below for estimating fugitive dust emissions from these sources. Fugitive dust emissions from materials handling, travel on unpaved roads, and wind erosion of storage piles are addressed in Chapters 4, 6 and 9 of this handbook, respectively.

The NEI emissions estimation methodology assumes that the TSP emission factors developed for copper ore mining apply to the three activities listed above for all metallic ore mining. PM10 emission factors for each of these three activities for metallic ore mining are based on the following PM10/TSP ratios: 0.35 for overburden removal, 0.81 for drilling and blasting, and 0.43 for loading/unloading operations.[3]

In the NEI emission estimation methodology, non-metallic ore mining emissions are calculated by assuming that the PM10 emission factors for western surface coal mining apply to mining of all non-metallic ores. The PM10/TSP ratio for western surface coal mining is 0.40.[4]

Coal mining includes two additional sources of PM10 emissions compared to the sources considered for metallic and non-metallic ores, namely overburden replacement and truck loading and unloading of that overburden. EPA assumes that the amount of overburden material handled equals ten times the amount of coal mined.[5]

EPA Method 5 (or equivalent) source tests used to generate particulate emission factors include a filterable PM fraction that is captured on or prior to a filter and a condensable PM fraction that is collected in the impinger portion of the sampling train. PM emission factors presented below include the sum of the filterable and condensable PM fractions for those cases where information exists for both fractions. For those cases where information only exists for the filterable PM fraction, this is clearly identified in the text below.

Previous NEI PM emission inventories for fugitive dust from mineral products industries assumed a PM2.5/PM10 ratio of 0.29.[2] In July 2006 EPA adopted revised PM2.5/PM10 ratios for several fugitive dust source categories, including a ratio of 0.1 for heavy vehicle traffic on unpaved surfaces around aggregate storage piles and a ratio of 0.15 for transfer of aggregate associated with buckets or conveyors based on the recent findings of MRI.[6] Thus, the PM2.5/PM10 ratio for fugitive dust from mineral products industries lies somewhere between 0.1 and 0.15.

Estimates of the amount of metallic and non-metallic ores handled at surface mines are available from the U.S. Geological Survey. Production figures for coal mining operations are available from the Energy Information Administration (EIA) in the U.S. Department of Energy.

11.2.1 Metallic Ores

EPA uses the following equation to calculate PM10 emissions from overburden removal, drilling and blasting, and loading and unloading from metallic ore mining operations:

$$E_m = A_m [EF_o + (B \times EF_b) + EF_l + EF_d] \quad (2)$$

where, A_m = metallic crude ore handled at surface mines (tons)
EF_o = PM10 open pit overburden removal emission factor for copper ore (lbs/ton)
B = fraction of total ore production that is obtained by blasting at metallic ore mines
EF_b = PM10 drilling/blasting emission factor for copper ore (lbs/ton)
EF_l = PM10 loading emission factor for copper ore (lbs/ton)
EF_d = PM10 truck dumping emission factor for copper ore (lbs/ton)

Utilizing the TSP emission factors and PM10/TSP ratios developed for copper ore mining operations, PM10 emissions from metallic ore mining operations are calculated as follows:

$$E_m = A_m [0.0003 + (0.57625 \times 0.0008) + 0.022 + 0.032] = 0.0548\ A_m \quad (3)$$

Based on NEI's emission estimation methodology that excludes fugitive dust emissions from haul truck traffic on unpaved surfaces, PM10 emissions from loading and truck dumping account for 40% and 58%, respectively, of the total PM10 emissions from metallic ore mining operations.

Uncontrolled filterable TSP and PM10 emission factors for metallic ore processing operations are presented in Table 11-1. These emission factors are for emissions after product recovery cyclones. Uncontrolled PM emission factors for taconite ore processing are presented in Table 11-2.

Table 11-1. Filterable TSP and PM10 Emission Factors for Metallic Ore Processing[a]

Source	TSP (lb/ton)	PM10 (lb/ton)
Low-moisture ores[b]		
Primary crushing	0.5	0.05
Secondary crushing	1.2	ND
Tertiary crushing	2.7	0.16
Material handling and transfer – all minerals except bauxite	0.12	0.06
Material handling and transfer – bauxite/alumina	1.1	ND
High-moisture ores[b]		
Primary crushing	0.02	0.009
Secondary crushing	0.05	0.02
Tertiary crushing	0.06	0.02
Material handling and transfer – all minerals except bauxite	0.01	0.004
Material handling and transfer – bauxite/alumina	ND	ND
Both low- and high-moisture ores[b]		
Wet grinding	Neg	Neg
Dry grinding with air conveying and/or air classification	28.8	26
Dry grinding without air conveying and/or air classification	2.4	0.31
Drying – all minerals except titanium/zirconium sands	19.7	12

[a] Emission factors in units of lb/ton of material processed. One lb/ton is equivalent to 0.5 kg/Mg. Neg = negligible. ND = no data.

[b] Low-moisture ore has a moisture content of less than 4% by weight; high-moisture ore has a moisture content of at least 4% by weight.

Table 11-2. TSP and PM10 Emission Factors for Taconite Ore Processing[a]

Source	TSP (lb/ton)	PM10 (lb/ton)
Natural gas-fired grate/kiln	7.4	0.65
Gas-fired vertical shaft top gas stack	16	ND
Oil-fired straight grate	1.2	ND

[a] Applicable to both acid pellets and flux pellets. Emission factors in units of lb/ton of fired pellets produced. One lb/ton is equivalent to 0.5 kg/Mg. ND = no data.

11.2.2 Non-metallic Ores

EPA uses the following equation to calculate the PM10 emissions from overburden removal, drilling and blasting, and loading and unloading from non-metallic ore mining and rock quarrying operations:

$$E_n = A_n [EF_v + (D \times EF_r) + EF_a + 0.5 (EF_e + EF_t)] \quad (4)$$

where, A_n = non-metallic crude ore handled at surface mines (tons)
EF_v = PM10 open pit overburden removal emission factor at western surface coal mining operations (lbs/ton)

efficiencies of approximately 95 to 99%. The industry uses shaker, reverse air, and pulse jet filters as well as some cartridge units, but most newer facilities use pulse jet filters.

Successful control techniques used for haul roads are dust suppressant application, paving, route modifications, and soil stabilization. Controls for conveyors include covering and wet suppression; for storage piles, wet suppression, windbreaks, enclosure, and soil stabilizers; for conveyor and batch transfer points, wet suppression and various methods to reduce freefall distances (e. g., telescopic chutes, stone ladders, and hinged boom stacker conveyors); and for screening and other size classification, covering and wet suppression. Additional information on these control measures can be found in other chapters of this handbook.

AP-42 lists both uncontrolled and controlled PM10 emission factors for different control devices for many mineral processing industries. Comparing the controlled emission factor for a specific control device to the uncontrolled emission factor provides the PM10 control efficiency for that control device presented in Table 11-8.

Table 11-8. PM10 Control Efficiencies for Mineral Processing Operations

Mineral Products Industry	Source	Control Device	PM10 Control Efficiency (%)
Taconite ore	Natural gas fired kiln	Multiclone	79
Crushed stone	Tertiary crushing	Wet scrubber	78
	Fines crushing	Wet scrubber	92
	Screening	Wet scrubber	91.6
	Fines screening	Wet scrubber	96.9
	Conveyor transfer point	Wet scrubber	95.9
Pulverized mineral	Grinding	Fabric filter	>99.5%
Lightweight aggregate	Rotary Kiln	Wet scrubber	99.4
	Rotary Kiln	Fabric filter	99.8
	Rotary Kiln	Electrostatic precipitator	99.5
Kaolin	Flash calciner	Fabric filter	99.99
Fire clay	Rotary dryer	Cyclone	68
	Rotary calciner	Multiclone and wet scrubber	99.8
Bentonite	Rotary dryer	Fabric filter	99.6
Hot mix asphalt	Dryer	Fabric filter	99.4
Brick manufacturing	Grinding and screening	Fabric filter	99.4
Portland cement	Wet process kiln	Electrostatic precipitator	97.9
Cement batching	Unloading into silo	Wet scrubber	99.9
	Mixer loading (central mix)	Wet scrubber	96.5
	Truck loading (truck mix)	Wet scrubber	91.6
Gypsum manufacturing	Flash calciner	Fabric filter	99.8
Lime manufacturing	Coal-fired rotary kiln	Fabric filter	99.6
	Coal-fired rotary kiln	Electrostatic precipitator	90

11.4 Regulatory Formats

PM stack emissions from taconite ore processing facilities constructed or modified after August 24, 1982 are regulated under 40 CFR 60, subpart LL to 0.05 g/m^3 (0.022

grains/ft^3). In addition, the opacity of stack emissions is limited to 7% unless the stack is equipped with a wet scrubber, and process fugitive emissions are limited to 10%. The standard does not affect emissions from indurating furnaces. Emissions from Portland cement plants constructed or modified after August 17, 1971 are regulated to limit PM emissions from kilns to 0.15 kg/Mg (0.30 lb/ton) of feed, and to limit PM emissions from clinker coolers to 0.050 kg/Mg (0.10 lb/ton) of feed. Emissions of filterable PM from rotary lime kilns constructed or modified after May 3, 1977 are regulated to 0.30 kg/Mg (0.60 lb/ton) of stone feed under 40 CFR Part 60, subpart HH.

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. Example regulatory formats downloaded from the Internet for several local air quality agencies in the WRAP region are presented in Table 11-9. The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- San Joaquin Valley APCD, CA: valleyair.org/SJV_main.asp
- South Coast AQMD, CA: aqmd.gov/rules
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: www.maricopa.gov/aq

Table 11-9. Example Regulatory Formats for Mineral Processing Operations

Control Measure	Agency
Limits PM emissions from cement kilns to 30 pounds per hour for kiln feed rates of 75 tons per hour or greater. Limits PM emissions to 0.40 pound per ton of kiln feed for kiln feed rates less than 75 tons per hour.	SCAQMD Rule 1112.1 02/07/86
Limits opacity from cement manufacturing facilities to 20 % for open storage piles and unpaved roads and to 10 % for all other operations, Specifies covers for conveying systems and enclosures for conveying system transfer points, and loading/unloading through an enclosed system.	SCAQMD Rule 1156 11/04/05
Limits opacity from an aggregate handling facility to 20% based on an average of 12 consecutive readings, or 50% based on five individual, consecutive readings, using the SCAQMD Opacity Test Method No. 9B.	SCAQMD Rule 1157 01/07/05
Limits (a) PM emissions from stacks at a nonmetallic mineral processing plant to 0.02 grains/dry standard cubic foot (gr/dscf) (50 mg/dscm), (b) opacity of fugitive dust emissions from any transfer point on a conveying system to 7%, and (c) opacity of fugitive dust emissions from any crusher to 15%.	Maricopa Co. Rule 316 6/08/05
No owner or operator of an existing tunnel kiln at a brick or structural product manufacturing facility shall emit more than 0.42 lbs. of particulate matter per ton of fired product from a tunnel kiln with a capacity throughput ≥ 1 ton/hour.	Maricopa Co. Rule 325 8/10/05
Limits the opacity of fugitive dust emissions at metallic or non-metallic mineral mining and processing facilities (based on an aggregate of at least 3 minutes in any 1-hour period) to (a) 10% for grinding mills, screening equipment, conveyors, conveyor transfer points, bagging equipment, storage bin, storage piles, stacker, enclosed truck, or rail car loading stations, (b) 15% for crushers, and (c) 7% for emissions from a stack or exhaust from a control device or building vent.	Clark Co. Rule 34 7/01/04

11.5 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations. An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Table 11-10 summarizes the compliance tools that are applicable for mineral processing industries.

Table 11-10. Compliance Tools for Mineral Processing Industries

Record keeping	Site inspection/monitoring
Maintain daily records onsite for a period of five years, and make such records available to the Executive Officer upon request for: (a) hours of operation, (b) volume of ore or aggregate mined, (c) watering and sweeping schedule for internal paved roads, (d) number of haul trucks exiting the facility, (e) Fugitive Dust Advisories, (f) Dust Control Plan, (g) Operation and Maintenance Plan for the on-site emission control system (ECS), and (h) twice daily moisture results of aggregate material.	Observation of dust plumes during periods of mining and processing operations; observation of dust plume opacity (visible emissions) exceeding a standard; tests of surface soil stabilization and aggregate moisture content; monitoring device to record pressures, flow rates and other ECS operating conditions; posting of signs restricting speeds to 15 mph; observation of high winds (e.g., >25 mph).

11.6 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for mineral processing operations. The reader is directed to Sections 4.6, 6.8, and 9.6 of the handbook for examples of calculating the cost effectiveness of specific control

measures for several minerals processing operations, namely materials handling, haul trucks traveling on unpaved industrial roads, and storage pile wind erosion, respectively.

A sample cost-effectiveness calculation is presented below for a specific control measure (wet scrubber for tertiary crushing of crushed stone) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous control measure for mineral processing, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Tertiary Crushing at Crushed Stone Processing Plant

Step 1. Determine source activity and control application parameters.

Material throughput (tons/year)	2,000,000
Control Measure	Wet scrubber
Control application/frequency	Continuous
Economic Life of Control System (yr)	10
Control Efficiency (Reference)	78% (AP-42)

The material throughput and economic life are assumed values for illustrative purposes. A wet scrubber system has been chosen as the control measure for reducing fugitive dust emissions. The moisture content of the crushed stone averages 0.21 to 1.3% for facilities without a wet suppression system and 0.55 to 2.88% for facilities with a wet suppression system.[1]

Step 2. Obtain Uncontrolled PM Emission Factors. The uncontrolled PM10 emission factor for tertiary crushing of crushed stone published in AP-42 is 0.0024 lb/ton of material throughput. The PM2.5/PM10 ratio for crushed stone aggregate is 0.15 (MRI, 2006).[6]

Step 3. Calculate Uncontrolled PM Emissions. The annual uncontrolled PM10 emissions are calculated by multiplying the PM10 emission factor by the material throughput and then divided by 2,000 lbs to compute the annual emissions in tons per year, as follows:

Annual emissions = (EF x Material Throughput)/2,000

Annual PM10 Emissions = (0.0024 x 2,000,000)/2000 = 2.4 tons
Annual PM2.5 Emissions = 0.15 (Annual PM10 Emissions) = 0.36 tons

Step 4. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) are equal to the uncontrolled emissions (calculated above in Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency).

For this example, a wet scrubber/suppression system with a control efficiency of 78% has been selected as the control measure. Thus, the annual controlled PM10 and PM2.5 emissions estimates are calculated to be:

Annual Controlled PM10 emissions = (2.4 tons) x (1 – 0.78) = 0.53 tons
Annual Controlled PM2.5 emissions = (0.36 tons) x (1 – 0.78) = 0.079 tons

Step 5. Determine Annual Cost to Control PM Emissions.

Capital costs ($)	16,000
Operating/Maintenance costs ($)	12,200
Annual Interest Rate	3%
Capital Recovery Factor	0.12
Annualized Cost ($/yr)	14,076

The capital costs, annual operating and maintenance costs, and annual interest rate (AIR) are assumed values for illustrative purposes. The Capital Recovery Factor (CRF) is calculated from the Annual Interest Rate (AIR) and the Economic Life of the control system, as follows:

$$CRF = AIR \times (1+AIR)^{\text{Economic life}} / (1+AIR)^{\text{Economic life}} - 1$$
$$CRF = 3\% \times (1+ 3\%)^{10} / (1+ 3\%)^{10} - 1 = 0.1172$$

The Annualized Cost is calculated by adding the product of the Capital Recovery Factor (CRF) multiplied by the Capital costs to the sum of the Operating and Maintenance costs, as follows:

Annualized Cost = (CRF x Capital costs) + Operating/Maintenance costs
Annualized Cost = (0.1172 x $16,000) + $12,200 = $14,076

Step 6. Calculate Cost-effectiveness. Cost-effectiveness is calculated by dividing the annualized cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions:

Cost-effectiveness = Annualized Cost/ (Uncontrolled emissions – Controlled emissions)

Cost-effectiveness for PM10 emissions = $14,075 / (2.4 – 0.53) = $7,519/ton
Cost-effectiveness for PM2.5 emissions = $14,075 / (0.36 – 0.079) = $50,127/ton

11.7 References

1. USEPA, 2006. *Compilation of Air Pollutant Emission Factors*, AP-42 Section 11 (Minerals Products Industry), Fifth Edition.

2. USEPA, 2004. *Documentation for the Final 1999 National Emissions Inventory (Version 3.0) for Criteria Pollutants and Ammonia: Area Sources*, report prepared by E. H. Pechan and Associates for the USEPA OAQPS, January 31.

3. USEPA, 1986. *Generalized Particle Size Distributions for Use in Preparing Size-Specific Particulate Emissions Inventories*, EPA-450/4-86-013, July.

4. USEPA, 1990. *AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants*, EPA-450/4-90-003, March.

5. USEPA, 2001. *Procedures Document for National Emission Inventory, Criteria Air Pollutants, 1985-1999*, EPA-454/R-01-006, March.

6. MRI, 2006. *Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Emission Factors*, prepared for the WRAP by Midwest Research Institute, Feb. 1.

7. USEPA, 2006. AP-42 *Section 11.12: Concrete Batching,* updated in June.

8. USEPA, 1998. *National Air Pollutant Emission Trends Procedure Document for 1900-1996*, EPA-454/R-98-008, May.

Chapter 12. Abrasive Blasting

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12.1 Emission Estimation Methodology

This section was adapted from Section 13.2.6 of EPA's Compilation of Air Pollutant Emission Factors (AP-42). Section 13.2.6 was last updated in September 1997.

Abrasive blasting is the use of abrasive material to clean and prepare metal or masonry surfaces prior to painting. Sand is the most widely used blasting abrasive.[1] Other abrasive materials include coal slag, smelter slag, cast iron grit, cast iron shot, steel shot, garnet, walnut shells, carbon dioxide pellets, as well as synthetic abrasives such as silicon carbide, aluminum oxide, and glass or plastic beads. The PM10 and PM2.5 emission factors listed in AP-42 for sand blasting of mild steel are 13 lb/1,000 lb abrasive and 1.3 lb/1,000 lb abrasive, respectively, giving a PM2.5/PM10 ratio of 0.1. Using grit or shot instead of sand as the abrasive media reduces total PM emissions by 76% and 90%, respectively.

12.2 Demonstrated Control Techniques

A number of different methods have been used to control the emissions from abrasive blasting. Theses methods include: blast enclosures; vacuum blasters; drapes; water curtains; wet blasting; and reclaim systems. Wet blasting controls include not only traditional wet blasting processes but also high pressure water blasting, high pressure water and abrasive blasting, and air and water abrasive blasting. For wet blasting, control efficiencies between 50 and 93 percent have been reported. Fabric filters are typically used to control emissions from enclosed abrasive blasting operations with reported control efficiencies in excess of 95%.[1]

Muleski and Downing recently tested the use of a polyurethane sponge material impregnated with different abrasive materials and compared the particulate emissions from this new sponge media with that from traditional abrasive materials.[2] The pliable nature of the sponge material allows it to surround the point of abrasive impact, thus capturing airborne dust emissions. The most commonly sold sponge media is a product containing 30 grit aluminum oxide known as "Silver 30". Using recycled sponge media mixed with fresh abrasive material per the manufacturer's recommendations reduced TSP emissions by 94% and PM10 emissions by 96% compared to traditionally used abrasives such as coal slag and silica sand. In other words, when used as recommended (i.e., recycled sponge media with fresh abrasive material added), the foam-based blasting media achieved a control level essentially identical to that of fabric filtration.

12.3 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. As an example, Maricopa County's Rule 312 states that all abrasive blasting operations shall be performed in a confined enclosure, unless one of the following conditions are met, in which case unconfined blasting may be performed: (a) the item to be blasted exceeds 8 ft. in any one dimension, or (b) the

surface being blasted is fixed in a permanent location, cannot easily be moved into a confined enclosure, and the surface is not normally dismantled or moved prior to abrasive blasting.[3] Dry abrasive blasting in a confined enclosure with a forced air exhaust requires the use of either a certified abrasive (i.e., an abrasive certified by the California Air Resources Board), or venting to an emission control system (ECS) for which the operator must maintain an operation and maintenance plan. A list of abrasives currently certified by CARB as permissible for dry outdoor blasting can be obtained from Maricopa County's website (maricopa.gov/aq/divisions/planning.aspx#rules). For unconfined blasting, at least one of the following control measures shall be used: wet abrasive blasting, vacuum blasting, or dry abrasive blasting, provided that all of the following conditions are met: performed only on a metal substrate, use of certified abrasive for dry unconfined blasting, blasting paint that has a lead content of less than 0.1 percent, abrasive blasting operation directed away from unpaved surfaces, and the certified abrasive may only be used once unless contaminants are separated from the abrasive after each use. No dry unconfined abrasive blasting operation shall be conducted when the 1-hour average wind speed is greater than 25 miles per hour.

Maricopa County Rule 312 states no owner or operator shall discharge into the atmosphere from any abrasive blasting operation any air contaminant for an observation period or periods aggregating more than three minutes in any sixty minute period an opacity conducted in accordance with EPA Reference Method 9 ("Visual Determination of the Opacity of Emissions from Stationary Sources," 40 CFR 60, Appendix A) equal to or greater than 20 percent. At the end of the work shift the owner or operator shall clean up spillage, carryout, and/or track out of any spent abrasive material with a potential to be transported during periods where the wind exceeds 25 mph.

The South Coast AQMD's Rule 1140 states that before blasting all abrasives used for dry unconfined blasting shall contain no more than1% by weight material passing a No. 70 U.S. Standard sieve, and after blasting the abrasive shall not contain more than 1.8% by weight material five microns or smaller.[4] Rule 1140 states that visible emission evaluation of abrasive blasting operations shall be conducted in accordance with the following provisions:

1. Emissions shall be read in opacities and recorded in percentages.
2. The light source should be behind the observer during daylight hours.
3. The light source should be behind the emission during hours of darkness.
4. The observer position should be at approximately right angles to wind direction and at a distance no less than twice the height of the source but not more than a quarter mile from the base of the source.
5. Emissions from unconfined abrasive blasting shall be read at the densest point in the plume, which point shall be at least 25 feet from the source.

6. Where the presence of uncombined water is the only reason for failure to comply with opacity limits, the opacity limits shall not apply. The burden of proof in establishing that opacity limits shall not apply shall be upon the operator.

7. Emissions from unconfined abrasive blasting employing multiple nozzles shall be evaluated as a single source unless it can be demonstrated by the operator that each nozzle, evaluated separately, meets the requirements of this rule.

8. Emissions from confined abrasive blasting shall be read at the densest point after the air contaminant leaves the enclosure.

The website addresses for obtaining information on fugitive dust regulations for local air quality districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- San Joaquin Valley APCD, CA: valleyair.org/SJV_main.asp
- South Coast AQMD, CA: aqmd.gov/rules
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: www.maricopa.gov/aq

12.4 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations. An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Maricopa County Rule 312 states that as a minimum each owner or operator subject to this rule shall keep the following records onsite for at least 5 years at permitted Title V

sources and for at least 2 years at Non-Title V sources: (a) the type and amount of solid abrasive material consumed on a monthly basis, including the name of the certified abrasive used, as applicable; and (b) Material Safety Data Sheets (MSDS) or results of any lead testing that was performed on paint that is to be removed via unconfined blasting, as applicable. In addition if blasting operations occur daily or are a part of a facility's primary work activity, then records shall be kept of the blasting equipment including a description of the type of blasting (e.g., confined, unconfined, sand, wet, etc.), the location of the blasting equipment or specify if the equipment is portable, a description of the emission control system (ECS) associated with the blasting operations, the days of the week blasting occurs, and the normal hours of operation. If blasting operations occur periodically, then records shall be kept of the dates the blasting occurs, the blasting equipment that is operating including a description of the type of blasting, and a description of the ECS associated with the blasting operations.

12.5 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for abrasive blasting operations. A sample cost-effectiveness calculation is presented below for a specific control measure (fabric filtration used to capture particulates from sand blasting of mild steel) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous control measure for abrasive blasting, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Sand Blasting of Mild Steel

Step 1. Determine source activity and control application parameters.

Silica sand abrasive use (tons/year)	10
Control Measure	Fabric Filter
Control application/frequency	Continuous
Economic Life of Control System (yr)	10
Control Efficiency (Reference)	95% (AP-42)

The amount of abrasive material used on a yearly basis and the economic life of the control system are assumed values for illustrative purposes. A fabric filter filtration system has been chosen as the control measure for reducing fugitive dust emissions from abrasive blasting of mild steel.

Step 2. Obtain Uncontrolled PM Emission Factors. The uncontrolled PM10 and PM2.5 emission factors for sand blasting of mild steel published in AP-42 are 26 lb/ton of abrasive and 2.6 lb/ton of abrasive.

Step 3. Calculate Uncontrolled PM Emissions. The annual uncontrolled PM emissions are calculated by multiplying the PM emission factors by the amount of abrasive material used per year divided by 2,000 lb/ton to produce emission estimates in tons per year, as follows:

- Annual PM10 Emissions = (26 lb/ton x 10 tons/year) / 2,000 lb/ton = 0.13 tons
- Annual PM2.5 Emissions = (2.6 lb/ton x 10 tons/year) / 2,000 lb/ton = 0.013 tons

Step 4. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) are equal to the uncontrolled emissions (calculated above in Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency).

For this example, fabric filters with a control efficiency of 95%% has been selected as the control measure. Thus, the annual controlled PM10 and PM2.5 emissions estimates are calculated to be:

Annual Controlled PM10 emissions = (0.13 tons) x (1 – 0.95) = 0.0065 tons
Annual Controlled PM2.5 emissions = (0.013 tons) x (1 – 0.95) = 0.00065 tons

Step 5. Determine Annual Cost to Control PM Emissions.

Capital costs ($)	10,000
Annual operating and maintenance costs ($)	1,000
Annual Interest Rate	3%
Capital Recovery Factor	0.12
Annualized Cost ($/yr)	2,200

The capital costs, annual operating and maintenance costs, and annual interest rate (AIR) are assumed values for illustrative purposes. The Capital Recovery Factor (CRF) is calculated from the Annual Interest Rate (AIR) and the Economic Life of the control system, as follows:

$$CRF = AIR \times (1+AIR)^{\text{Economic life}} / (1+AIR)^{\text{Economic life}} - 1$$
$$CRF = 3\% \times (1+ 3\%)^{10} / (1+ 3\%)^{10} - 1 = 0.1172$$

The Annualized Cost is calculated by adding the product of the Capital Recovery Factor (CRF) multiplied by the Capital costs to the sum of the operating and maintenance costs, as follows:

Annualized Cost = (CRF x Capital costs) + Operating and Maintenance costs
Annualized Cost = (0.1172 x $10,000) + $1,000 = $2,172

Step 6. Calculate Cost-effectiveness. Cost-effectiveness is calculated by dividing the annualized cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions:

Cost-effectiveness = Annualized Cost/ (Uncontrolled emissions – Controlled emissions)

Cost-effectiveness for PM10 emissions = $2,172/ (0.13 – 0.0065) = $17,590/ton
Cost-effectiveness for PM2.5 emissions = $2,172/ (0.013 – 0.00065) = $175,895/ton

12.6 References

1. USEPA, 1997. *Abrasives Blasting*, Section 13.2.6 of Compilation of Air Pollutant Emission Factors, September.

2. Muleski, G. E., and Downing, J., 2006. *Control of Abrasive Blasting Emissions through Improved Materials*, paper presented at the EPA 15th International Emission Inventory Conference, New Orleans, LA, May 16-18.

3. Maricopa County, 2003. *Rule 312 - Abrasive Blasting*, July 2.

4. South Coast AQMD, 1985. *Rule 1140 – Abrasive Blasting*, August 2.

Chapter 13. Livestock Husbandry

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13.1 Emission Estimation Methodology

This section was adapted from Section 7.6 of CARB's Emission Inventory Methodology. Section 7.6 was last updated in May 2004.

AP-42 does not address livestock husbandry. Thus, the methodology adopted by the California Air Resources Board (CARB) is presented here as the primary emissions estimation methodology for this fugitive dust source category.[1] The CARB methodology only provides estimates of PM10 emissions from cattle feedlot and dairy operations. For each category, the emissions are calculated by multiplying a per animal emission factor by the population of each animal type. The livestock population is available from the US Department of Agriculture. Livestock emissions research is ongoing.

CARB's PM10 emission factor for cattle feedlots is 28.9 lbs PM10/1000 head/day (i.e., 10.55 lb/head-year) based on a work performed by UC Davis.[2] The corresponding PM10 emission factor for dairy cattle is 6.72 lbs PM10/1000 head/day (i.e., 2.45 lb/head-year) based on an emission factor of 4.4 lbs PM10/1000 lactating head/day, developed by Texas A&M.[3] To make the Texas emission factor more California specific, it was multiplied by a scaling factor based on the ratio of the California feedlot PM10 emission factor to a Texas feedlot PM10 emission factor. This ratio is 29:19; thus, the scaling factor is 1.53. The PM10/TSP and PM2.5/PM10 ratios for this source category are 0.48 and 0.11, respectively.

The CARB methodology is subject to the following assumptions:

1. Population data and residence time data adequately represent average animal population values for each county.

2. All animals within a single class produce the same emissions (e.g., dairy cows, calves, and heifers).

3. It is assumed that all dairies or feedlots produce the same PM10 emissions on a per-head basis.

4. For dairies, the baseline PM10 emission factor includes the effects of support stock such as calves and heifers. This is because the emissions testing included these animals within its analysis.

5. For feedlots, the baseline PM10 emission factor represents the population mix at a typical feedlot.

6. The method does not include emissions for animal waste composting or land application.

7. Due to insufficient temporal information, it is assumed that air emissions occur evenly throughout the year seven days a week and 24 hours a day.

The San Joaquin Valley APCD has developed separate emission factors for different operations associated with dairies and cattle feedlots based on CARB's PM10 emission factors of 2.45 lb/head-year for dairies and 10.55 lb/head-year for cattle feedlots.[4] These emission factors are shown in Table 13-1.

Table 13-1. PM10 Emission Factors for Cattle Feedlot and Dairy Operations

Source Category	Operation	PM10 Emission Factor
Dairies	Corral/Manure Handling	1.845 lb/head-yr (freestall) 4.6 lb/head-yr (open corral)
	Overall Management/Feeding	1.845 lb/head-yr (freestall) 4.6 lb/head-yr (open corral)
	Unpaved Road	0.369 lb/head-yr
	Unpaved Area	0.123 lb/head-yr
Cattle Feedlots	Pens/Manure Handling	7.94 lb/head-yr
	Overall Management/Feeding	0.53 lb/head-yr
	Unpaved Road	1.59 lb/head-yr
	Unpaved Area	0.53 lb/head-yr

13.2 Demonstrated Control Techniques

CARB does not list any control measures for this fugitive dust source category. However, the San Joaquin Valley APCD (District) has been very proactive in identifying potential control measures for cattle feedlots and dairies. For example, fugitive dust emissions originating from the disturbance of dry and loose surface material (e.g., feed, bedding material, and manure) caused by animal movement and mechanical disturbances by vehicles can be controlled by sprinkling water on the surface of the open corral or pen, removing manure before it dries, using a layer of wood chips in dusty areas, housing dairy cattle in stalls with concrete floors rather than dirt floors, and adopting a feeding schedule when animals are less active. Wind blown fugitive dust originating from uncovered bulk materials can be controlled by applying water or chemical suppressants, covering the material with tarps or storing the material in enclosure, and erecting wind barriers. Since no data could be found in the literature on which to base a control efficiency factor for these practices, the District has conservatively assumed a minimal 10% control effectiveness. Control measures identified by the District for cattle feedlots and dairies are shown in Table 13-2. A list of control measures for cattle feedlots and dairies is available from the California Air Pollution Control Officers' Association's (CAPCOA) agricultural clearing house website (http://capcoa.org/ag_clearinghouse.htm).

Control measures for unpaved roads and unpaved parking/traffic areas include application of chemical dust suppressants, paving the surface or placing a layer of gravel over the unpaved surface, speed reduction, access restriction, and track out control measures. These control measures and their associated control efficiencies are listed in Chapter 6 of the handbook. Control measures for storage piles of bulk materials other than manure include dust suppressants, watering, covering and wind barriers. These

control measures and their associated control efficiencies are listed in Chapter 9 of the handbook.

Table 13-2. Control Measures for Cattle Feedlots and Dairies[a]

Source Category	Control Measure
Manure management	Frequent manure removal (every 6 months) with equipment that leaves an evenly corral surface of compacted manure on top of the soil.
	Insert the manure directly beneath the soil.
Dust entrainment by animal	Daily water sprinkling, and timing of watering around 6PM or before sunset.
	Use of freestalls with concrete surface for animal housing/feeding areas to allow frequent manure removal.
	Stocking density adjustment in accordance to the moisture found in the unit area to reduce dust.
	Removal of loose material on surface and maintain a compacted layer of manure 1 to 2 inches thick.
	Addition of fibrous material such as wood chips to working pens.
	Delaying the last daily feeding to reduce end-of-day spike in livestock activity.
Other	Adding moisture to hay
	Using a totally enclosed delivery system and covered feeders, and using palletized feed.
	Planting rows of vegetation around a building to create a barrier for air exiting from the building.

[a] Since no data could be found in the literature on which to base a control efficiency factor for these practices, the SJVAPCD has conservatively assumed a minimal 10% control effectiveness for each control measure.

13.3 Regulatory Formats

Fugitive dust control options have been embedded in many regulations for state and local agencies in the WRAP region. However, most air quality districts currently exempt agricultural operations from controlling fugitive dust. Air quality districts that regulate fugitive dust emissions from agricultural operations include Clark County, NV and several districts in California such as the Imperial County APCD, the San Joaquin Valley APCD and the South Coast AQMD. Imperial County APCD prohibits fugitive dust emissions from farming activities for farms over 40 acres. The San Joaquin Valley APCD and the South Coast AQMD prohibit fugitive dust emissions for the larger farms defined as farms with areas where the combined disturbed surface area within one continuous property line and not separated by a paved public road is greater than 10 acres. SJVAPCD's Rule 4550 applies to animal feeding operations (AFOs) that house animals for a total of at least 45 days in any 12 month period for agricultural parcels exceeding 100 acres excluding the AFO. Example regulatory formats downloaded from the Internet for several local air quality agencies in the WRAP region are presented in Table 13-3. CAPCOA's agricultural clearing house website (http://capcoa.org/ag_clearinghouse.htm) provides links to rules of different air quality agencies that regulate fugitive dust emissions from agricultural operations. The website addresses for obtaining information on fugitive dust regulations for local air quality

districts within California, for Clark County, NV, and for Maricopa County, AZ, are as follows:

- Districts within California: www.arb.ca.gov/drdb/drdb.htm
- San Joaquin Valley APCD, CA: valleyair.org/SJV_main.asp
- South Coast AQMD, CA: aqmd.gov/rules
- Clark County, NV: www.co.clark.nv.us/air_quality/regs.htm
- Maricopa County, AZ: www.maricopa.gov/aq

Table 13-3. Example Regulatory Formats for Cattle Feedlots and Dairies

Control Measure	Agency
Limit fugitive dust from animal feeding operations for facilities exceeding 100 acres excluding the AFO by requiring owner/operator to implement a Conservation Management Practice (CMP) Plan with district approved control methods.	SJVAPCD Rule 4550 5/20/04
Limit fugitive dust from off-field agricultural sources such as unpaved roads with more than 75 trips/day and bulk materials handling by requiring producers to draft and implement a Fugitive Dust Management Plan with district approved control methods.	SJVAPCD Rule 8081 9/16/04
Producers that voluntarily implement district approved conservation practices and complete and maintain the self-monitoring plan can maintain an exemption from the Rule 403 general requirements.	SCAQMD Rule 403 4/02/04
Cease tilling/mulching activities when wind speeds are greater than 25 mph.	SCAQMD Rule 403.1 4/02/04
Limit fugitive dust from paved and unpaved roads and livestock operations by ceasing all hay grinding activities between 2 and 5 PM if visible emissions extend more than 50 feet from a hay grinding source, and treating all unpaved access connections to livestock operations and unpaved feed lane access areas with either pavement, gravel (maintained to a depth of 4 inches), or asphaltic road-base.	SCAQMD Rule 1186 4/02/04
Reduce fugitive dust from livestock feed yards by requiring that the moisture content in the top three inches of manure piles for occupied pens be maintained between 20% and 40%. This rule also outlines manure management practices, including removal.	SCAQMD Rule 1186 4/02/04
Reduce fugitive dust from livestock feed yards by requiring that the moisture content for manure piles be maintained between 20% and 40%.	ICAPCD Rule 420 8/13/02

13.4 Compliance Tools

Compliance tools assure that the regulatory requirements, including application of dust controls, are being followed. Three major categories of compliance tools are discussed below.

Record keeping: A compliance plan is typically specified in local air quality rules and mandates record keeping of source operation and compliance activities by the source owner/operator. The plan includes a description of how a source proposes to comply with all applicable requirements, log sheets for daily dust control, and schedules for compliance activities and submittal of progress reports to the air quality agency. The purpose of a compliance plan is to provide a consistent reasonable process for documenting air quality violations, notifying alleged violators, and initiating enforcement action to ensure that violations are addressed in a timely and appropriate manner.

Site inspection: This activity includes (1) review of compliance records, (2) proximate inspections (sampling and analysis of source material), and (3) general observations. An inspector can use photography to document compliance with an air quality regulation.

On-site monitoring: EPA has stated that "An enforceable regulation must also contain test procedures in order to determine whether sources are in compliance." Monitoring can include observation of visible plume opacity, surface testing for crust strength and moisture content, and other means for assuring that specified controls are in place.

Table 13-4 summarizes the compliance tools that are applicable for cattle feedlots and dairies.

Table 13-4. Compliance Tools for Cattle Feedlot and Dairies

Record keeping	Site inspection/monitoring
Maintain daily records to document the specific dust control options taken; maintain such records for a period of not less than three years; and make such records available to the APCO upon request. Submit a Conservation Management Practice (CMP) Plan to the APCO listing the selected CMPs for implementation, contact information for the owner/operator, a site plan or map of the site.	Observation of dust plumes and dust plume opacity (visible emissions) exceeding a standard; observation of high winds (e.g., >25 mph).

13.5 Sample Cost-Effectiveness Calculation

This section is intended to demonstrate how to select a cost-effective control measure for cattle feedlots and dairies. A sample cost-effectiveness calculation is presented below for cattle feedlots for a specific control measure (frequent scraping and manure removal) to illustrate the procedure. The sample calculation includes the entire series of steps for estimating uncontrolled emissions (with correction parameters and source extent), controlled emissions, emission reductions, control costs, and control cost-effectiveness values for PM10 and PM2.5. In selecting the most advantageous control measure for cattle feedlots and dairies, the same procedure is used to evaluate each candidate control measure (utilizing the control measure specific control efficiency and cost data), and the control measure with the most favorable cost-effectiveness and feasibility characteristics is identified.

Sample Calculation for Cattle Feedlots

Step 1. Determine source activity and control application parameters.

Number of cattle at the feedlot	1,000
Control Measure	Scraping and manure removal

Frequency of operations per year	2
Control Efficiency	10%

Scraping and removal of manure from feedlot pens every six months has been chosen as the applied control measure. The number of cattle at the feedlot is an assumed value for illustrative purposes. Since no data could be found in the literature on which to base a control efficiency factor for control measures for cattle feedlots and dairies, the SJVAPCD has conservatively assumed a minimal 10% control effectiveness for each control measure (SVAPCD, 2004[4]).

Step 2. Obtain Uncontrolled PM10 Emission Factor.
The uncontrolled PM10 emission factor for cattle feedlots is 10.55 lb/head/year (CARB, 2004[1]).

Step 3. Calculate Uncontrolled PM Emissions. The PM10 emission factor, EF, (given in Step 2) is multiplied by the number of cattle (see activity data) and then divided by 2,000 lb/ton to compute the annual PM10 emissions in tons per year, as follows:

Annual PM10 emissions = (EF x Number of Cattle) / 2,000
Annual PM10 Emissions = (10.55 x 1,000) / 2,000 = 5.28 tons

Annual PM2.5 emissions = (PM2.5/PM10) x PM10 emissions
where the PM2.5/PM10 ratio for cattle feedlots is 0.11 (CARB, 2004[1]).

Annual PM2.5 emissions = 0.11 x PM10 emissions
Annual PM2.5 Emissions = (0.11 x 5.28 tons) = 0.58 tons

Step 4. Calculate Controlled PM Emissions. The controlled PM emissions (i.e., the PM emissions remaining after control) are equal to the uncontrolled emissions (calculated above in Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency)

For this example, we have selected frequent scraping and removal of manure as our control measure. Based on a control efficiency estimate of 10%, the annual controlled PM emissions are calculated to be:

Annual Controlled PM10 emissions = (5.28 tons) x (1 – 0.10) = 4.75 tons
Annual Controlled PM2.5 emissions = (0.58 tons) x (1 – 0.10) = 0.52 tons

Step 5. Determine Annual Cost to Control PM Emissions.

The SJVAPCD assumes that the cost for scraping and removal of manure is $3 per head.[4] Thus, the annualized cost of scraping and removal of manure from feedlot pens holding 1,000 head of cattle every six months is calculated as follows:

Annual Costs = Cost per head to remove manure x Head of Cattle x Frequency of Ops/year
Annual Costs = $3/head x 1,000 head x 2/year = $6,000

Step 6. Calculate Cost-effectiveness. The cost-effectiveness is calculated by dividing the annual cost by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions from the uncontrolled emissions as follows:

Cost-effectiveness = Annual Cost/ (Uncontrolled emissions – Controlled emissions)

Cost-effectiveness for PM10 emissions = $6,000 / (5.28 – 4.75) = $11,374/ton
Cost-effectiveness for PM2.5 emissions = $6,000 / (0.58 – 0.52) = $103,404/ton

Note: The actual cost-effectiveness values for this control measure are lower than the calculated values shown here since the SJVAPCD assumes that the control efficiency is at least 10%.

13.6 References

1. CARB, 2004. *Livestock Husbandry*, Section 7.6 of CARB's Emission Inventory Procedural Manual, Volume III: Methods for Assessing Area Source Emissions, May.

2. Flocchini, R.G., James, T.A., et. al., 2001. *Sources and Sinks of PM10 in the San Joaquin Valley*, Interim Report prepared by the Air Quality Group, Crocker Nuclear Laboratory, University of California, Davis. August 10.

3. Goodrich, L.B., Parnell, C.B., Mukhtar, S., Lacey, R.E., Shaw, B.W., 2002. *Preliminary PM10 Emission Factor for Freestall Dairies,* Department of Biological and Agricultural Engineering, Texas A&M University, paper presented at the 2002 ASAE Annual International Meeting, Chicago, IL, July 28-31.

4. SJVAPCD, 2005. *Emission Reduction Calculation Methodology for Dairies and Feedlot Conservation Management Practices,* Draft Report prepared by San Joaquin Valley APCD, November 24.

Chapter 14. Miscellaneous Minor Fugitive Dust Sources

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14.1 Introduction

This Chapter identifies emission estimation methods for several minor fugitive dust source categories not addressed in other chapters of the handbook. Because several of these methods have not been approved by federal or state agencies, the reader is cautioned in the use of the emission factors included in these emission estimation methods. The emission estimation methods discussed here address:

- windblown dust from unpaved roads
- uncovered haul trucks,
- unpaved shoulders,
- leaf blowers, and
- explosives detonation.

14.2 Windblown Dust from Unpaved Roads

The California Air Resources Board adopted the U.S. EPA-modified version of the USDA-ARS derived wind erosion equation (WEQ) used to estimate windblown dust from agricultural fields[1] to estimate windblown dust from unpaved roads[2] as follows:

$$E_S = a\ I\ K\ C\ L'\ V' \qquad (1)$$

where, E_S = the quantity of unpaved road dust entrained to the air by wind erosion (tons TSP/acre/year)
a = portion of total roadway wind erosion losses that are assumed to be suspended into the air; estimated to be 0.038 for TSP
I = soil erodibility (tons/acre/year)
K = surface roughness factor (dimensionless)
C = climatic factor (dimensionless)
L' = unsheltered width factor (dimensionless)
V' = vegetative cover factor (dimensionless)

In summary, the 'I' term in the windblown dust equation provides an estimate of the soil erosion from an area that is large, flat, bare, and highly erodible. The additional terms in the equation reduce emissions from this worst-case scenario. The climatic, C, factor helps to account for regional differences in wind and rainfall. If a surface is rough, as represented by K, soil erosion is decreased. If the length of the erodible area parallel to the wind is short, then the erosion is decreased, as represented by the L' factor. If there is crop residue on the erodible area, then erosion is further decreased by the V' factor. A detailed discussion of the parameters I, K, C, L', and V' is presented in Chapter 7 of the Handbook.

Soil Erodibility – I. The soil erodibility, I, of an unpaved road is related to the soil type of the road surface. Because roadway soil types are not readily available, the county specific, average soil types are used to estimate the erodibility. The county soil types are computed using a geographic information system (GIS) to average detailed county soil profile maps provided by the Natural Resources Conservation Service. This approach

assumes that unpaved road surfaces have the same soil characteristics as the base soils in the vicinity of the roadway.

Climatic Factor - C. The rate of soil erosion varies directly with the wind velocity and inversely with the soil surface moisture. The climatic factor is used to adjust for these parameters. CARB staff computed the county 'C' factors based on regional rainfall and wind speed data measured in California.

Surface Roughness - K. Surface roughness can help to reduce soil erosion. The 'K' factor is used to account for ridges or furrows that help to minimize wind related erosion. Because most unpaved roads are flat, the surface roughness factor is assumed to be 1.0, indicating no reduction in emissions due to surface texture.

Unsheltered Width Factor - L'. Soil erosion is directly related to the unprotected width of the area in the prevailing wind direction. For unpaved roads, depending on the wind direction, the width of the erosive area parallel to the wind direction could be very narrow, very long, or somewhere in between. CARB assumes that the wind direction is equally distributed for all roads and that the average value of L' is 0.32.

Vegetative Cover Factor - V'. Vegetative cover reduces soil erosion. For unpaved roads, it is assumed that there is no vegetative cover, therefore a value of 1.0 is used.

Based on analysis of resuspended California soil samples, CARB estimated that the PM10/TSP ratio for windblown dust from unpaved roads is 0.5. Windblown dust emissions from unpaved roads are calculated for each county by multiplying the PM10 emission rate (i.e., 50% of the TSP emission rate calculated from the TSP emission factor equation, Equation 1) by the unpaved road mileage and the average width of the unpaved roads assumed to average 20 feet. CARB's estimates does not include windblown dust from agricultural unpaved roads since they assume that windblown emissions from agricultural unpaved roads are included in the source category for windblown dust from agricultural lands.

The CARB methodology is subject to the following assumptions and limitations:

1. It is assumed that the unpaved road soil characteristics are approximately the same as the soils in the vicinity of the unpaved road that are not used for vehicular travel. This implies that no additional gravel or other treatments have been applied to the unpaved roads.

2. It is assumed that the soil wind erosion equation may be reasonably applied to estimate windblown dust from unpaved roads. Because of the large differences between unpaved road surfaces and agricultural lands, the validity of this assumption is questionable.

3. Using the soil erosion equation, it is assumed that 3.8% of the total eroded material is
entrained to the air. ('a' factor = 0.038).

4. It is assumed that the county average soil erodibility, 'I', and climatic, 'C', factors are representative (on average) of the overall county conditions.

5. It is assumed that a value of 0.32 for the unsheltered width factor, L', is valid.

6. It is assumed that unpaved roads have no vegetative cover and are essentially flat.

7. The typical unpaved road width is 20 feet.

8. This methodology assumes no extraordinary windstorm activity; only average annual conditions are estimated.

CARB is aware that their methodology for estimating windblown dust from unpaved roads is built on a foundation of dubious assumptions. Because of the differences between unpaved roads and agricultural lands, it is unlikely that the agricultural soil erosion equation provides very accurate estimates of windblown road dust. The emissions estimates could be improved by performing wind tunnel tests on unpaved roads, and then extrapolating the resulting emission factors to the remainder of the State. With the use of geographic information systems, it is also possible to incorporate localized climatological and soil texture properties into the emission estimates. In addition, the mileage of unpaved roads could be improved using available digital maps which include public, as well as private unpaved roads.

14.3 Uncovered Haul Trucks

A total suspended particulate (TSP) emission factors for uncovered haul trucks was included in a USEPA report published in 1989.[3] The hourly TSP emission estimate for uncovered haul trucks was estimated from the following equation:

$$TSP\ (lb/yd^2/hour) = 0.00015\ u$$

where, u = sum of wind speed and vehicle speed (mph)

To estimate PM10 and PM2.5 emissions, PM10/TSP and PM2.5/TSP ratios will need to be obtained for this source category.

14.4 Unpaved Shoulders

DRI developed a PM10 emission factor for the resuspension of fugitive dust from unpaved shoulders created by the wake of high-profile vehicles such as tractor-trailers (semis) traveling on paved roads at high speed (50-65 mph).[4] The emission factor for unpaved shoulder with surface loadings of 4,500 to 5,500 g/m^2, silt content of 3 to 6%, and a surface moisture content under 1% was given as:

$$EF = 0.028 \pm 0.014\ lb/VMT$$

DRI concluded that emissions from unpaved shoulders due to smaller vehicles such as cars, vans and SUVs were negligible. It should be pointed out that the PM10

emissions were estimated utilizing nephelometers that are not quantitative for coarse particles. Thus, PM10 emissions may be underestimated.

14.5 Leaf Blowers

Dennis Fitz and other researchers from CE-CERT at UC Riverside recently completed a study on behalf of the San Joaquin Valley APCD to determine PM2.5 and PM10 emissions from leaf blowing/vacuuming, raking and sweeping activities.[5] Real-time PM2.5 and PM10 measurements were obtained with DustTrak aerosol monitors calibrated against Arizona road dust (NIST SRM 8632). The precision of the DustTrak PM2.5 and PM10 measurements were determined to be 19% and 27%, respectively, based on collocated DustTrak monitors. The accuracy of the DustTrak measurements was determined by comparing the DustTrak measurements to the filter-based measurements. In general the two data sets agreed to within 50%, which was similar to the variability between replicate tests. The PM2.5 and PM10 emission factors determined by DustTrak monitors for different cleaning activities and surfaces are summarized in Table 14-1. The DustTrak results for blowing leaves on asphalt and concrete surfaces as a function of power blower type are presented in Table 14-2.

Table 14-1. PM Emission Factors for Leaf Blowing/Vacuuming, Raking and Sweeping Activities (mg/m^2)

Cleaning Action and Surface Cleaned	PM2.5	PM10
Power blowing/vacuuming over concrete surfaces	30	80
Power blowing/vacuuming over asphalt surfaces	20	60
Push broom to sweep asphalt surfaces	0	20
Push broom to sweep concrete surfaces	20	80
Raking asphalt surfaces	0	0
Raking on concrete surfaces	0	0
Raking lawns	0	1
Power blowing on lawns	1	2
Power blowing from gutters	9	30
Power blowing on packed dirt	80	120
Power blowing cut grass on walkways	2	6

Table 14-2. PM Emission Factors by Power Blower Type and Surface (mg/m^2)

Power Blower Type	Surface	PM2.5	PM10
Electric	Asphalt	20	60
Gas Hand Held	Asphalt	10	40
Gas Backpack	Asphalt	20	60
Electric: vacuum mode	Asphalt	40	120
Electric: vacuum mode, full bag	Asphalt	20	70
Electric	Concrete	40	130
Gas Hand Held	Concrete	10	40
Gas Backpack	Concrete	30	70
Electric: vacuum mode	Concrete	30	80

14.6 Explosives Detonation

Emissions from the detonation of industrial explosives and firing of small arms (excluding military operations) are addressed in Section 13.3 of AP-42.[6] This section of AP-42 was last updated in February 1980 (and reformatted in January 1995). Such large quantities of particulate are generated in the shattering of rock and earth by the explosive that the quantity of particulates from the explosive charge cannot be distinguished. With the exception of a few studies in underground mines, most studies have been performed in laboratory test chambers that differ substantially from the actual environment. Any estimates of emissions from explosives use must be regarded as approximations that cannot be made more precise because explosives are not used in a precise, reproducible manner.

14.7 References

1. USEPA, 1974. *Development of Emission Factors for Fugitive Dust Sources*, EPA 450/3-74-037, U.S. EPA, Research Triangle Park, NC, June; updated in September 1988 in *Control of Open Fugitive Dust Sources, EPA-450/3-88-008.*

2. CARB, 1997. *Windblown Dust – Unpaved Roads*, Section 7.13 in: CARB's Emission Inventory Procedural Manual, Volume III: Methods for Assessing Area Source Emissions.

3. USEPA, January 1989. Air/Superfund National Technical Guidance Study Series; Volume III – Estimation of Air Emissions from Cleanup Activities at Superfund Sites, Interim final report EPA-450/1-89-003.

4. Moosmuller, H., Gillies, J.A., Rogers, C.F., Dubois, D.W., Chow, J.C., Watson, J.G., Langston, R., 1998. *Particulate Emission Rates for Unpaved Shoulders along a Paved Road*, J.AWMA 48:398.

5. Fitz, D., et al., 2006. *Determination of Particulate Emission Rates from Leaf Blowers,* paper presented at the USEPA 15th International Emission Inventory Conference, New Orleans, LA, May 24.

6. USEPA, 2006. *Compilation of Air Pollutant Emission Factors*, AP-42 Section 13.3 (Explosives Detonation), Fifth Edition.

GLOSSARY

Areal extent—Fraction (or percentage) of the source area that is affected by the control measure.

Aerodynamic particle size—Diameter of a sphere of unit density, which behaves aerodynamically as a particle with different sizes, shapes, and densities.

Aggregate material—Mineral particles, such as sand or stone, typically derived from a mechanical process.

Agricultural tilling—Mechanical disturbance of agricultural soil by discing, shaping, chiseling, and leveling using a tractor or implement.

Annual interest rate—The yearly cost of borrowing money, expressed as a percentage of the amount borrowed.

Annualized cost of control—Average yearly costs of a control system including annual operating costs such as labor, materials, utilities and maintenance items, and annualized costs of the capital costs of purchase and installation. Annualized costs are dependent on the interest rate paid on borrowed money or collectable by the plant as interest (if available capital is used), the useful life of the control equipment, and depreciation rates of the equipment.

AP-42—Abbreviation for the U.S. EPA's publication "Compilation of Air Pollutant Emission Factors."

BACM—Abbreviation for Best Available Control Measures—techniques that achieve the maximum degree of emissions reduction from a source, as determined on a case-by-case basis considering technological and economic feasibility.

Bare soil adjustment—Adjustment to windblown emissions for the planted acreage on which plants do not establish.

Base year—Year for which the pre-control emissions inventory was performed.

Baseline Emissions—Emissions (total or source) in the base year.

Batch drop—Materials handling process involving free fall of aggregate, as from a bucket.

Border adjustment—Adjustment to windblown emissions for the nonplanted regions of the acreage dedicated to a given crop that separate it from surrounding regions.

CAPCOA—Acronym for California Air Pollution Control Officers' Association.

Capital recovery factor—Amount of money per dollar of machinery investment required to pay annual interest costs on unrecovered investment and to recover the costs of the investment within a specified number of years at the given interest rate.

Chemical wetting agent—Compound added to water in order to enhance the penetration of water into dusty material and prevent dust emissions.

Clay—Cohesive soil with individual particles not visible to the unaided human eye (less than 0.002 mm in diameter). Clay can be molded into a ball that will not crumble.

Climatic factor "C," annual—Parameter used to estimate the effects of climate on soil erodibility. Garden City, Kansas is set to 1.0 and temperature, wind, and precipitation are used to adjust the factor.

Climatic factor "C," monthly—Parameter used to modify the annual "C" factor equation for a particular month of the year. The U.S. EPA uses mean monthly wind speed in place of the annual wind speed. The ARB methodology uses the month-as-a-year method.

Cloddiness—Level of relatively stable agglomerations in soil caused by exposure to water cohort (maturation class).

Compliance tool—Means for checking whether a facility is meeting legal requirements for control of a pollutant. Compliance tools include record keeping logs, databases, and site inspection methods.

Continuous drop—Materials handling process involving continual release of aggregate, such as from a conveyor.

Control application rate/frequency—Amount of pollutant suppressant applied over a particular area and the number of times per period that the suppressant is applied.

Control efficiency—Degree (e.g., percentage) to which a control measure is effective in limiting the release of a pollutant.

Control efficiency decay rate—Decrease in control efficiency for a control measure with a limited life span.

Control extent—Fraction of emissions from a source category that will be affected by a control method.

Control measure—Procedure or course of action taken to reduce air pollution. Preventive measures reduce source extent or incorporate process modifications or adjust work practices to reduce the amount of pollutants. Mitigative measures involve the periodic removal of pollutant causing materials, such as the cleanup of

spillage on travel surfaces and cleanup of material spillage at conveyor transfer points.

Controlled emissions—Estimated emissions (total or by source category) after application of control measures, i.e., remaining emissions.

Cost effectiveness— Control cost divided by the mass of emissions reduced (most typically expressed in terms of "dollars per ton").

Crop calendar—Temporal distribution of agricultural activities (e.g., planting and harvesting dates).

Crop canopy cover factor—Adjustment to windblown emissions based on the crop canopy cover.

Crop canopy cover—Fraction of land sheltered by vegetation, as viewed directly from above.

Crust—The hard outer surface of soil (or other dust producing material) that inhibits the wind erosion of underlying fine particles.

Cut and fill—The activities of earthmoving equipment where soil or rock is removed from one area (cut) and deposited elsewhere on shallow ground (fill).

***De Minimis* source**—Facility or operation with emissions that are below a certain threshold, classifying them as insignificant sources of emissions; refer to 40 CFR, Part 52 for more details.

Demonstrated control technique—A control measure that is supported by verifiable tests as to the control efficiency the measure will achieve.

Deposition—Accumulation of airborne particles on ground-level surfaces through gravitational settling and other physical phenomena.

Disturbance—Destabilization of a land surface from its undisturbed natural condition thereby increasing the potential for fugitive dust emissions.

Dunes—Ridges or mounds of loose, wind-blown material, usually sand.

Dust—Fine, dry particles of matter able to be suspended in the air.

Dust Control Plan—Legally mandated plan for a geographical area or dust-producing operation that identifies how emissions will be controlled to attain the requirements of the Clean Air Act and Amendments.

Dust suppressants—Water, hygroscopic materials, solution of water and chemical surfactant, foam, or non-toxic chemical/ organic stabilizers not prohibited for use by the U.S. Environmental Protection Agency or any applicable law, rule or regulation, as a treatment material to reduce fugitive dust emissions.

Economic Life—Length of time during which a product or piece of property may be put to profitable use. (Usually less than its physical life)

Emission activity level—A numerical measure of the intensity of a process that emits pollutants (e.g., miles traveled by a vehicle, tons of transferred material). Also referred to as source extent or process rate.

Emission factor—A representative value that relates the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. These factors are usually expressed as the weight of pollutant divided by a unit weight, volume, distance, or duration of the activity emitting the pollutant.

Emission parameters—Values that affect pollutant emissions, such as moisture level and silt content of the emitting material.

Emission reduction—Amount (mass or percent) of emissions eliminated by control application.

Enforcement/Compliance costs—Expenses associated with enforcing control measures, including government agency and source facility expenditures.

Erosion potential—Value representing the potential for suspension of surface dust by wind erosion. Depending on the presence of a surface crust or surface disturbance, particle size distribution, and moisture content, a site is characterized as having 1) unlimited erosion potential, 2) limited erosion potential, or 3) no erosion potential.

Fastest mile of wind—The highest wind speed over a specified period (usually the 24-hour observational day) of any "mile" of wind. The fastest mile of wind is the reciprocal of the shortest interval (in 24 hours) that it takes one mile of air to pass a given point.

Fetch—Distance over which soil is eroded by a wind having a relatively constant direction and speed.

Friction velocity—Measure of shear stress of the wind on the exposed surface of soil or other aggregate material, causing loose particles to be lifted from the surface.

Fugitive dust source—Emitter of airborne particles where the particulate emissions cannot reasonably be passed through a stack, chimney, vent, or other functionally equivalent opening. Fugitive dust sources include roadways, construction

(earthmoving and demolition), material handling operations, soil tillage, and wind erosion.

Gravel—Soil particles ranging from 1/5 inch to 3 inches in diameter.

Grid counting method—Method used to estimate areas contained between contour lines on maps.

Ground inventory—A measurement of the amount of dust suppressant applied to an unpaved surface, usually expressed as gallons of suppressant per square yard of road surface.

Growing canopy fraction (GCF)—The proportion of the acreage that will have the crop canopy cover factor applied to it.

Half life of control—The time required for control efficiency to fall to half its initial value.

Irrigation factor (wetness)—Adjustment to the erodibility due to surface wetness from irrigation.

Long-term irrigation-based erodibility adjustment—Adjustment that takes into account changes in cloddiness of the soil, based upon differences between irrigated and nonirrigated soils.

Material throughput—Output rate of processed material.

Mitigative control—Control measure that periodically removes exposed dust-producing material.

MOBILE model—Software tool developed by EPA to predict gram per mile emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, carbon dioxide, particulate matter, and toxics from cars, trucks, and motorcycles under various conditions.

Mode—The most frequent value in a group of values. The approximate mode of a particle size distribution (i.e., particle size diameter) can be found by sieving a surface material sample to find the threshold friction velocity using a modification to W.S. Chepil's method.

Moisture content—A measurement, usually expressed as a percent, of the mass of water in a material sample. Moisture content is obtained by weighing the original sample and then drying the sample to obtain the mass of vaporized water.

Month-as-a-year—Term used by California Air Resources Board (ARB) staff to describe method of calculating the climatic "C" factor profile by assuming that each month's data for a given site describes a unique annual climatic regime.

Most cost-effective—Having the lowest cost per mass of PM emissions reduced.

Most efficient—Having the highest control efficiency (note that preventive controls are usually addressed before mitigative controls).

Mulch—Any material used to cover a soil surface to conserve soil moisture and prevent erosion.

Nonattainment area—Geographic area that is not in compliance with federal health-based air quality standards for an air pollutant (e.g., PM-10).

Nonerodible material—Objects larger than 1 centimeter in diameter that are not susceptible to movement even on windy days (e.g., gravel, hard-packed soil clods).

Operating/Maintenance costs—Expenses associated with personnel, materials, consumables, equipment repair, and other types of continuing expenses.

Overhead costs—A broad category of costs associated with administration.

Pan evaporation rate—The rate of evaporation from a US Class-A pan that is filled with water, with daily measurements made of the water level to compute the resulting daily water loss.

Peak wind gust—A maximum wind speed defined by U.S. weather observing practice, with gusts reported when the peak wind speed reaches at least 16 knots and the variation in wind speed between the peaks and lulls is at least 9 knots. The duration of a gust is usually less than 20 seconds.

Plant/harvest date pair—Methodology that uses planting cohorts split between harvest months, using the fraction of the total crop planted in a given month with the fraction of the total crop harvested in a given month.

PMx—Airborne particulate matter with aerodynamic diameters equal to or less than x μm (e.g. PM10, PM2.5)

Portable wind tunnel—Moveable air channel with an open bottom through which air is drawn at different velocities. This type of wind tunnel with a backend sampling system is used to investigate particle emissions by wind erosion, as a function of wind speed.

Postharvest soil cover factor—Adjustment to windblown emissions based on the fraction of land covered after harvest when viewed directly from above.

Precipitation effectiveness (PE)—See "Thornthwaite's precipitation-evaporation index"; the sum of 12 monthly values (ratios of precipitation to actual evapotranspiration).

Preventive control—Control measure that inhibits or minimizes the accumulation of exposed dust-producing material.

Prewatering—Application of water during construction and earthmoving operations to excavation areas and borrow pits before earth is excavated. The areas to be excavated are moistened to the full depth from the surface to the bottom of the excavation to achieve an optimum moisture content for fugitive dust control.

Quality rating—An assessment level of A through E as assigned by EPA to each emission factor in AP-42, with A being the best. A factor's rating is a general indication of the reliability, or robustness, of that factor.

Replant-to-different-crop factor—Adjustment to windblown emissions for harvested acreages that are quickly replanted to a different crop.

Reservoir—Amount of surface particles available for sustaining wind erosion. Surface soil properties determine the duration of dust events, and limited reservoirs will emit dust for a shorter duration of time (i.e., minutes) than unlimited reservoirs (i.e., days).

Revegetation—Vegetative cover that has been established on previously disturbed ground, such as a construction site.

Revised Wind Erosion Equation (RWEQ)—Model that is intermediate in complexity between the wind erosion equation (WEQ) and the wind erosion prediction system (WEPS).

Rock—Soil particles greater than 3 inches in diameter.

Roughness height—Height above ground level where the wind speed is theoretically reduced to zero because of surface obstructions; a measure of surface protrusion into the boundary layer wind flow.

Sand—Soil particles ranging from 0.05 to 2.0 mm in diameter; individual particles are visible to the unaided human eye.

Senescence—Process of plant aging and dying that is characterized by decreasing growth rates, chlorophyll breakdown, and mobilization of nitrogen out of leaves and into other plant organs.

Sheltering elements—Blockages to wind that inhibit wind erosion of soil. Examples include wind fences and trees.

SIC code—Abbreviation for Standard Industrial Classification code. A numbering system established by the Office of Management and Budget that identifies companies by industry.

Sieving—Process of passing a material through a series of woven square meshes of decreasing size to separate particles into different particle size classes. For agricultural soil classification, wet sieving disperses the material in a liquid before passing the suspension through one or more sieves. Dry sieving is used to characterize material dustiness levels and can be performed either by a mechanical sieve shaker or by rotational hand sieving.

Silt content—Percentage of particles less than 74 μm in physical diameter (i.e., fraction passing a standard 200-mesh sieve).

Silt—Noncohesive soil whose individual particles are not visible to the unaided human eye (0.002 to 0.05 mm). Silt will crumble when rolled into a ball.

Soil classes (types)—Classifications used by soil scientists: representative erodibilities have been measured, which allow soil maps to be used to estimate erodibilities for agricultural land.

Soil cover deterioration—Reduction in postharvest soil cover due to the effects of weather, sunlight, insects, microbes, etc.

Soil loss ratio (SLR)—The ratio of the soil loss for a soil of a given cover divided by the soil loss from bare soil.

Soil texture—The relative proportions of clay, silt, and sand in soil.

Soil—Surface material consisting of disintegrated rock and organic material.

Source Extent—See "Emission activity level.'

State Geographic Data Base (STATSGO)—Database of soil data produced and maintained by the NRCS.

Stepwise linear regression—Process of determining best-fit polynomials for a predictive mathematical model. The procedure involves least squares regression analysis in a forward stepping procedure

Surface disturbance—See "Disturbance."

Surface loading—Mass of loose material per paved road surface area. Total surface loading is measured by vacuuming a known area of paved road surface to obtain all material regardless of particle size. Silt surface loading is obtained by sieving the

total surface loading and refers only to particles with physical diameters less than 74 μm.

Surface stabilization/treatment/improvement—The paving, graveling, chemical stabilization, or watering of a dust-emitting surface to prevent dust emissions due to mechanical disturbance and wind erosion.

Thornthwaite's precipitation-evaporation index—A measure of soil aridity, calculated as the ratio of precipitation to evapotranspiration.

Threshold friction velocity—Friction velocity that closely corresponds to the threshold wind speed for wind erosion of a specific surface. See "Friction velocity."

Threshold source size—An emission level below which a facility or dust-emitting activity is not regulated.

Threshold wind speed—Wind speed (measured at a reference height of 10 m) below which wind erosion does not occur from the exposed surface being considered.

Tillage—Practice of producing a soil surface to maintain surface residue, prepare a seed bed, conserve soil moisture, and reduce wind erosion.

Trackout—Accumulation of mud/dirt on paved roads, as deposited by vehicles that exit unpaved sites such as construction areas, agricultural fields, quarries, dumps, or batch plants.

Traffic volume—Measure of the number of vehicles traveling over a road segment. Vehicle miles traveled (VMT) on a road equals the average daily traffic (ADT) times the roadway length.

Uncontrolled emissions—Total emissions before application of any control measures.

Unit-operation emission factors—Emission factors that represent sub-processes or separate activities associated with an emission source.

Vegetative cover/residue—Organic matter, either growing or dead, that protects the soil surface from the erosive force of wind.

Visible dust—For regulatory purposes, means airborne particles that obscure an observer's view to a degree equal to or greater than a specified opacity limit.

Wet stabilization/watering—See "Surface stabilization."

Wind barrier/Wind sheltering—See "Sheltering element."

Wind erosion equation (WEQ)—Methodology originally developed to estimate wind erosion from agricultural lands. Later modified by U.S. EPA to use for estimating PM emissions.

Wind Erosion Prediction System (WEPS)—Detailed simulation model to predict wind erosion emissions; currently in development. May be useful in future, especially for episodic modeling.

Wind erosion—Removal of dry soil particles from the ground surface by wind, causing airborne particulate matter downwind of the emitting soil area.

Wind shear—Force of wind parallel to a surface that can remove loose particles, as opposed to wind directly impacting the surface.

Worst-case emissions—See "Uncontrolled emissions."

Appendix A
Emission Quantification Techniques

EMISSION QUANTIFICATION TECHNIQUES

Fugitive dust emission rates and particle size distributions are difficult to quantify because of the diffuse and variable nature of such sources and the wide range of particle sizes, including particles that deposit immediately adjacent to the source. Standard source testing methods, which are designed for application to confined flows under steady-state, forced-flow conditions, are not suitable for the measurement of fugitive emissions unless the plume can be drawn into a forced-flow system. The available source testing methods for fugitive dust sources are described in the following paragraphs.

Mechanical Entrainment Processes

Because it is usually impractical to enclose open dust sources or to capture the entire emissions plume, only two methods are suitable for the measurement of particulate emissions from most open dust sources:

1. The upwind-downwind method involves the measurement of upwind and downwind particulate concentrations, utilizing ground-based samplers under known meteorological conditions, followed by a calculation of the source strength (mass emission rate) with atmospheric dispersion equations.[1]

2. The exposure-profiling method involves simultaneous, multipoint measurements of particulate concentration and wind speed over the effective cross section of the plume, followed by a calculation of the net particulate mass flux through integration of the plume profiles.[2]

In both cases it is customary to use high-volume air samplers, so that quantifiable sample mass can be accumulated in sampling periods no longer than about six hours.

Upwind-Downwind Method. The upwind-downwind method involves the measurement of airborne particulate concentrations both upwind and downwind of the pollutant source. The number of upwind sampling instruments depends on the degree of isolation of the source operation of concern (i.e., the absence of interference from other sources upwind). Increasing the number of downwind instruments improves the reliability in determining the emission rate by providing better plume definition. In order to reasonably define the plume emanating from a point source, instruments need to be located at a minimum of two downwind distances and three crosswind distances. The same sampling requirements pertain to line sources except that measurements need not be made at multiple crosswind distances.

Net downwind (i.e., downwind minus upwind) concentrations are used as input to atmospheric dispersion equations (normally of the Gaussian type) to back-calculate the particulate emission rate (i.e., source strength) required to generate the pollutant concentrations measured. Emission factors are obtained by dividing the calculated emission rate by the source extent. A number of meteorological parameters must be concurrently recorded for input to this dispersion equation. As a minimum, the wind direction and speed must be recorded on-site.

While the upwind-downwind method is applicable to virtually all types of sources, it has significant limitations with regard to the development of source-specific emission factors. Because of the impracticality of adjusting the locations of the sampling array for shifts in wind direction during sampling, it may be questionable to assume that the plume position is fixed in the application of the dispersion model. In addition, the usual assumption that a line or area source is uniformly emitting may not allow for a realistic representation of spatial variation in source activity.

Exposure-Profiling Method As an alternative to conventional upwind-downwind sampling, the exposure-profiling technique utilizes the emission profiling concept, which is the basis for the conventional ducted source testing method (i.e., USEPA Method 5[3]), except that, in the case of exposure-profiling, the ambient wind directs the plume to the sampling array. The passage of airborne particulate matter immediately downwind of the source is measured directly by means of a simultaneous, multipoint sampling of particulate concentration and wind velocity over the effective cross section of the fugitive emissions plume.

For the measurement of nonbuoyant fugitive emissions using exposure profiling, sampling heads are distributed over a vertical network positioned just downwind (usually about 5 m) from the source. Particulate sampling heads should be symmetrically distributed over the concentrated portion of the plume containing at least 80% of the total mass flux. A vertical line grid of at least three samplers is sufficient for the measurement of emissions from line or moving point sources (see Figure A-1), while a two-dimensional array of at least five samplers is required for quantification of the fixed virtual point source of emissions. For quantifying emissions of particles larger than about 10 μm, the particulate samplers should have directional intakes, as discussed below. At least one upwind sampler must be operated to measure the background concentration, and wind speed and direction must be measured concurrentlv on-site.

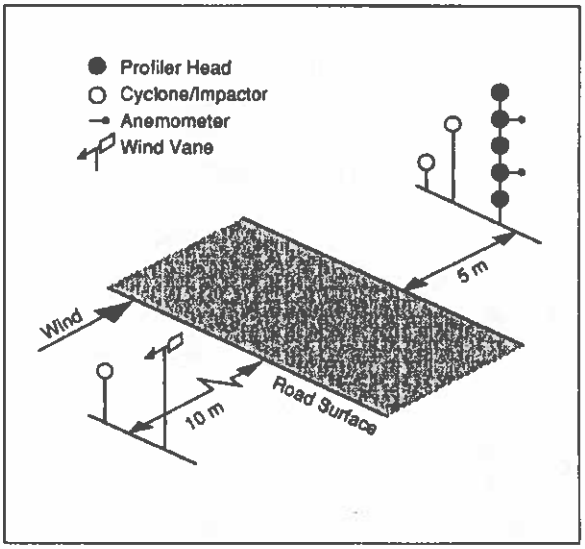

Figure A-1. Exposure Profiling Method—Roadway

The particulate emission rate is obtained by a spatial integration of the distributed measurements of exposure (accumulated mass flux), which is the product of mass concentration and wind speed:

$$R = \int_A C(h,w)u(h,w)dhdw \qquad (1)$$

where, R = emission rate, (g/s)
C = net particulate concentration, (g/m^3)
u = wind speed, (m/s)
h = vertical distance coordinate, (m)
w = lateral distance coordinate, (m)
A = effective cross-sectional area of plume, (m^2)

Usually, a numerical integration scheme is used to calculate the emission rate. This mass-balance calculation scheme requires no assumptions about plume dispersion phenomena.

Isokinetic Sampling Regardless of which method is used, isokinetic sampling is required for a representative collection of particles larger than about 10 μm in aerodynamic diameter. The directional sampling intakes are pointed into the mean wind direction and the intake velocity of each sampler is periodically adjusted (usually with intake nozzles) to closely match the mean wind velocity approaching the sampling intake. Because of natural fluctuations in wind speed and direction, some anisokinetic sampling effects will always be encountered. If the angle α between the mean wind direction and the direction of the sampling axis equals 30°, the sampling error is about 10%.[4] For an isokinetic flow ratio of sampling intake speed to approach wind speed between 0.8 and 1.2, the sampling error is about 5%.[4]

Wind Erosion

The two wind erosion source testing methods of interest are the upwind-downwind method as described above and the portable wind tunnel method. The wind tunnel method involves the use of a portable open-floored wind tunnel for *in situ* measurement of emissions from representative surfaces under predetermined wind conditions.[5]

Upwind-Downwind Method The upwind-downwind method is burdened with practical difficulties for the study of wind erosion, in that the onset of erosion and its intensity is beyond the control of the investigator. In addition, background (upwind) particulate concentrations tend to be high during erosion events, making source isolation very difficult.

Wind Tunnel Method The most common version of the wind tunnel method utilizes a pull-through wind tunnel with an open-floored test section placed directly over the surface to be tested. Air is drawn through the tunnel at controlled velocities. The exit air stream from the test section passes through a circular duct fitted with a directional sampling probe at the downstream end. Air is drawn isokinetically through the probe by

a high-volume sampling train. The wind tunnel method incorporates the essential features of the USEPA Method 5 stack sampling method.[3] The one prime difference, the use of single-point sampling, is justified by the high turbulence levels in the sampling module. The measurement uncertainty inherent in this method is of the same order as that in Method 5, which has been subjected to extensive collaborative testing by EPA. The wind tunnel method relies on a straightforward mass-balance technique for the calculation of emission rate. By sampling under light ambient wind conditions, background interferences from upwind erosion sources can be avoided. Although a portable wind tunnel does not generate the larger scales of turbulent motion found in the atmosphere, the turbulent boundary layer formed within the tunnel simulates the smaller scales of atmospheric turbulence. It is the smaller-scale turbulence, which penetrates the wind flow in direct contact with the erodible surface and contributes to the particle entrainment mechanisms.[6]

Particle Sizing

Concurrent with the measurement of mass emissions, the aerodynamic particle size distribution should be characterized. Chemical, biological, and morphological analyses may also be performed to characterize the nature and origin of the particles. For particle sizing, a high-volume cyclone/cascade impactor featuring isokinetic sample collection has been used.[7] A cyclone preseparator (or other device) is needed to remove the coarse particles, which otherwise would bounce off the greased substrate stages within the impactor, causing fine-particle bias. Once again, the sampling intake is pointed into the wind and the sampling velocity adjusted to the mean local wind speed by fitting the intake with a nozzle of appropriate size. This system offers the advantage of a direct determination of aerodynamic particle size.

Another particle sizing option includes an analysis of the particulate deposit by optical or electron microscopy. Disadvantages include: (a) potential artificial disaggregation of particle clusters during sample preparation, and (b) uncertainties in converting physical size data to equivalent aerodynamic diameters. In a collaborative field test of the exposure-profiling method, the cyclone/impactor method was judged to be more suitable than microscopy for the particle sizing of fugitive dust emissions.[8]

Control Efficiency Estimation

Field evaluation of the control efficiency requires that the study design include not only adequate emission measurement techniques but also a proven "control application plan." In the past, two major types of plans have been used. Under the Type-1 plan, controlled and uncontrolled emission measurements are obtained simultaneously. Under the Type-2 plan, uncontrolled tests are performed initially, followed by controlled tests.

In order to ensure comparability between the operating characteristics of the controlled and uncontrolled sources, many evaluations are forced to employ Type-2 plans. An example would be a wet suppression system used on a primary crusher. One important exception to this; however, is unpaved-road dust control. In this instance,

testing under a Type-1 plan may be conducted on two or more contiguous road segments. One segment is left untreated and the others are treated with the dust suppressant. Under a Type-2 plan, a normalization of emissions may be required to allow for potential differences in source characteristics during the uncontrolled and controlled tests because they do not occur simultaneously.

References

1. 1. Kolnsberg, H. J., 1976. *Technical Manual for the Measurement of Fugitive Emissions: Upwind/Downwind Sampling Method for Industrial Fugitive Emissions*, EPA-600/2-76-089a, NTIS Publication No. PB253092.
2. 2. Cowherd, C. Jr., Axtell, K. Jr., Maxwell, C.M., Jutze, G.A., 1974. *Development of Emission Factors for Fugitive Dust Sources*, EPA Publication No. EPA-450/3-74-037, NTIS Publication No. PB-238 262.
3. 3. U.S. EPA, 1977. *Standards of Performance for New Stationary Sources*, R*evision to Reference Methods 1-8, Federal Register,* 18 August 1977, Part II.
4. 4. Watson, H. H., 1954. *Errors due to Anisokinetic Sampling of Aerosols*, Am. Ind. Hyg. Assoc. Quart., 15:2 1, 1954.
5. 5. Cuscino, T. Jr., Muleski, G. E., and Cowherd, C. Jr., 1983. *Iron and Steel Plant Open Source Fugitive Emission Evaluation*, EPA-600/2-83-1 10, NTIS Publication No. PB84-1 10568.
6. 6. Gillette, D. A.,1978. *Tests with a Portable Wind Tunnel for Determining Wind Erosion Threshold Velocities*, Atmos. Environ., 12:2309.
7. 7. Cowherd, C. Jr., Kinsey, J.S., Wallace, D.D., Grelinger, M.A., Cuscino, T.A., Neulicht, R.M., 1986. *Identification, Assessment, and Control of Fugitive Particulate Emissions*, EPA-600/8-86-023, NTIS Publication No. PB86-2300083.
8. 8. McCain, J. D., Pyle, B. E., McCrillis, R. C., 1985. *Comparative Study of Open Source Particulate Emission Measurement Techniques*, in *Proceedings of the Air Pollution Control Association Annual Meeting,* Pittsburgh PA: APCA.

Appendix B

Estimated Costs of Fugitive Dust Control Measures

Source Category	Control Measure	Estimated Costs	Comments/Assumptions
Paved Roads	4' Paved Shoulders	$8,200/mile-year	Useful life of 20 years
	Polymer emulsion to stabilize shoulders	$0.92/square yard	
	Purchase PM10 efficient sweeper	$190/mile-year	Useful life of 8 years; sweep 15 centerline miles per day
	Clean up spills	$640/cleanup	
Unpaved Roads and Parking Areas	Pave unpaved roads	$44,100/mile-year	Useful life of 25 years
	Pave section 100' long before facility exit	$716/year	30' wide with 3" of asphalt; useful life of 25 years
	Pave unpaved parking lots	$0.23/ft^2-year	Useful life of 25 years
	Pipe grid trackout control device	$1,820/year	Useful life of 8 years
	Gravel bed to reduce trackout	$1,360/year	50' x 30' x 3" thick
	Post speed limit sign	$53/year for two signs	Useful life of 15 years
	Apply water to unpaved parking lot once a day	$68-$81/acre-day	
	Chemical dust suppressant	$5,340/acre-year	Useful life of 1 year
Construction and Demolition	Chemical dust suppressant	$5,340/acre-year	Useful life of 1 year
	Apply water once a day	$68-$81/acre-day	
	Apply water during high winds	$272/acre	
	Prohibit activities during high winds	$1.360 per 8 hour day idled	Demolition of 1,000 ft^2 structure on 1.2 acres
	Require air quality monitoring	$7,500/month	
	Onsite dust control coordinator	$100/day	
	Sprinkler system to maintain minimum soil moisture of 12%	$138/acre	
	Limit speed to 15 mph	$22/inspection	Radar gun = $700
	Post speed limit signs	$180/sign	
Bulk Materials	3-sided enclosure with 50% porosity	$109/year	Useful life of 15 years; pile volume = 5 yd^3
Disturbed Open Areas	Polymer emulsion dust suppressant	$2,140/acre	Surface stabilized for 3 years if no vehicle disturbance
	Gravel, 1" deep	$490/acre-year	Useful life of 15 years
	Post no trespassing signs	$53/sign	Useful life of 15 years
Windblown Dust	Prohibit activities at construction sites during high winds	$3,100 per high wind day	40 acre construction site
	Water storage pile each hour during high winds	$22/day	100 cubic yard pile

Reference: Sierra Research, Inc., *Final BACM Technological and Economic Feasibility Analysis,* prepared for the San Joaquin Valley APCD, March 21, 2003.

Appendix C

Methodology for Calculating Cost-Effectiveness of Fugitive Dust Control Measures

INTRODUCTION

In compiling information on control cost-effectiveness estimates for the fugitive dust handbook, we discovered that many of the estimates provided in contractor reports prepared for air quality agencies for PM10 SIPs contain either hard to substantiate assumptions or unrealistic assumptions. Depending on which assumptions are used, the control cost-effectiveness estimates can range over one to two orders of magnitude. Rather than presenting existing cost-effectiveness estimates, we have prepared a detailed methodology containing the steps to calculate cost-effectiveness that is presented below. We recommend that the handbook user calculate the cost-effectiveness values for different fugitive dust control options based on current cost data and assumptions that are applicable to their particular situation.

Based on field measurements of uncontrolled and controlled unpaved road emissions conducted by Midwest Research Institute, there were no significant differences in the measured control efficiencies for the PM2.5 and PM10 size fractions. Thus, the cost-effectiveness for PM2.5 reduction can be calculated by dividing the cost-effectiveness estimate for PM10 reduction by the PM2.5/PM10 ratio for that fugitive dust source.

TECHNICAL APPROACH

The steps necessary to calculate the cost-effectiveness for different fugitive dust control measures are listed below. This methodology was employed to calculate the cost-effectiveness for each control application case study for the different fugitive dust source categories addressed in the handbook.

Step 1: Select a specific control measure for the fugitive dust source category of interest.

Step 2: Specify the basic parameters required to calculate uncontrolled and controlled emissions for the specific source:

(a) applicable emission factor equation
(b) parameters used in the emission factor equation
(c) source extent (activity level)
(d) characteristics of the source
(e) control measure implementation schedule (frequency, application rate)

Step 3: Calculate the annual uncontrolled emission rate as the product of the emission factor and the source extent (from Step 2).

Step 4: Determine the control efficiency for the selected control measure. This may involve either (a) using a published value, (b) calculating the control efficiency based on comparing the controlled emissions estimate derived from the applicable emission factor equation with the uncontrolled emissions estimate derived from the same emission factor equation, or (c) specifying the desired control efficiency which then will entail determining the appropriate level of control to achieve the desired control efficiency.

Step 5: Calculate the annual controlled emissions rate (i.e., the emissions remaining after control) as the product of the annual uncontrolled emission rate (from Step 3) multiplied by the percentage that uncontrolled emissions are reduced, as follows:

Controlled emissions = Uncontrolled emissions x (1 – Control Efficiency).

Step 6: Calculate the reduction in emissions as the difference between the annual uncontrolled emission rate (from Step 3) and the annual controlled emission rate (from Step 5).

Step 7: Gather cost estimates for implementing the selected control measure for the following items:

(a) annualized capital costs (total capital costs/lifetime of the control)

(b) annual operating and maintenance costs that include overhead, enforcement, and compliance costs

Step 8: Calculate the annualized capital investment cost as the product of the annual capital cost and the capital recovery factor. The capital recovery factor is calculated as follows:

$$CRF = [\, i\,(1 + i)^n \,] \,/\, [(1 + i)^n - 1]$$

where, CRF = capital recovery factor
i = annual interest rate (fraction)
n = number of payment years

Step 9: Calculate the total annualized cost by combining the annualized capital investment cost (from Step 8) with annual operating and maintenance costs (from Step 7).

Step 10: Calculate the cost-effectiveness of the selected control measure by dividing the total annualized costs (from Step 9) by the emissions reduction. The emissions reduction is determined by subtracting the controlled emissions (from Step 5) from the uncontrolled emissions (from Step 3).

Appendix D
Fugitive PM10 Management Plan

Overview

The San Joaquin Valley APCD's Regulation VIII that addresses fugitive dust specifies two general control methods for controlling fugitive dust: (1) limiting visible dust emissions and (2) maintaining a stabilized surface. Visible dust emissions (VDE) may not exceed 20 percent opacity during periods when soil or other dust-producing materials are being disturbed by vehicles, equipment, or the forces of wind. "Opacity" is a visual evaluation of the amount of one's view that is obscured by a dust plume. The VDE limit applies to construction sites, the handling and storage of bulk materials, and to unpaved roads and traffic areas. A stabilized surface is a treated surface that is resistant to wind effects. This requirement applies to vacant open areas that have previously been disturbed, unpaved roads and traffic areas, and outdoor bulk storage piles. Methods for creating and maintaining a stabilized surface may include applying chemical or organic stabilizers, road-mix or paving materials, vegetative materials, or water for soaking the soil or forming a visible crust.

For unpaved roads and unpaved traffic areas, a Fugitive PM10 Management Plan (FPMP) may be implemented as a compliance alternative to the Visible Dust Emission standard and the requirement to maintain a stabilized unpaved road surface. The FPMP identifies the control measures to be implemented whenever vehicular traffic reaches and exceeds the applicable thresholds i.e., $\geq$ 75 vehicles per day or $\geq$26 vehicles per day with 3 or more axles). Acceptable control measures are those that have demonstrated to achieve at least 50 percent PM10 control efficiency when properly applied to an unpaved surface.

A FPMP may not be prepared for unpaved haul roads and access roads as well as traffic areas at construction projects nor as an alternative to a Conservation Management Practice (CMP) Plan for agricultural sources. Non-agricultural sources choosing to implement a FPMP are required to submit a plan to the District for approval. Once approved, the owner or operator is required to implement the District-approved FPMP on all days where traffic exceeds the applicable minimum thresholds. An approved plan remains active until the District notifies the owner or operator that it is no longer valid, or until the owner or operator notifies the District that plan implementation has been permanently discontinued.

Required Information

The FPMP must include the following information:

1. The names, addresses, and phone numbers of persons responsible for the preparation, submittal, and implementation of the FPMP, and of the persons responsible for the unpaved road or traffic area.

2. A plot plan or map showing the location of each unpaved road or traffic area to be covered by the FPMP, the total length in miles of unpaved roads, and the total area in acres of unpaved traffic areas that will be subject to the plan.

3. The months (and weeks, if known) of the year when vehicle traffic is expected to exceed the minimum thresholds described in the applicable rules, and the types of vehicles (i.e. passenger vehicles, trucks, mobile equipment, etc.).

4. The control methodologies to be applied, including:
   a. Product specifications;
   b. Manufacturer's usage instructions (method, frequency, and intensity of application);
   c. Application equipment (type, number, and capacity); and
   d. Environmental impact information and approvals or certificates related to appropriate and safe use for ground application.

5. The condition of the treated surfaces to be achieved as a result of the use of suppressants or other dust control material.

Record Keeping Requirements

Owners and operators are required to maintain records and any other supporting documents to demonstrate compliance for those days when control measures were implemented. Records are to include the type of control measure implemented, the location and extent of coverage, and the date, amount and frequency of applying dust suppressants.

Record keeping forms developed by the District or a facsimile that provides the necessary information may be used for record keeping purposes. Records are to be kept for a minimum of one year following termination of dust generating activities. Title V stationary sources are required to keep the records for a minimum of five years. Records must be made available to the District inspector upon request. The matrix below lists the forms to be used for Regulation VII record keeping.

	Activity at site and corresponding record keeping forms					
Industry	Bulk Materials	Unpaved Roads	Equip & Vehicle Storage	Open Areas	Earth Moving	Trackout and Carryout
Construction	A C	A C D	A C D	A C	A	B
Oilfields	A C	A C D	A C D	A C	A	B
Off-field Ag Ops	A C	A C D	A C D			
Ag Product Processing	A C	A C D	A C D			B
Bulk Materials	A C	A C D	A C D			B
Equipment & Vehicle Storage	A C	A C D	A C D	A C		B
Truck Stops	A C	A C D	A C D	A C		B

Form A = Daily watering schedule
Form B = Sweeping/cleanup schedule for trackout and carryout
Form C = Permanent control measure (e.g., paving, gravel, a grizzly, chemical dust suppressants)
Form D = Daily schedule for water application onto unpaved roads and equipment areas

Kras, Kim

From: Barria, German
Sent: Tuesday, April 26, 2022 4:59 PM
To: Bernoteit, Bob
Subject: Bunge North America, Inc. ID #183020ABT
Attachments: 96020027 - Bunge North America Inc. (Project Summary) - 04-26-2022.docx; 22040008 - Bunge Grain Milling Inc. - Construction Permit - Calc - 04-20-2022.docx; 96020027 - Bunge Grain Milling Inc. - Fesop - Cal - 04-20-2022.docx; 96020027 - Bunge North America Inc - FESOP - 04-20-2022.docx; 22040008 Bunge Grain Milling Inc. - Const Permit - 04-20-2022.docx

Bob,

Please find drafts construction and FESOP for your review.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
1021 N. Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

Project Summary
Proposed Federally Enforceable State Operating Permit (FESOP)
Bunge North America, Inc.
Danville, Vermilion County, Illinois

Site Identification No.: 183020ABT
Application No.: 96020027

Schedule
Public Comment Period Begins:
Public Comment Period Closes:

Illinois EPA Contacts
Permit Analyst: German Barria
Community Relations Coordinator: Brad Frost
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I. INTRODUCTION

Bunge North America, Inc. has applied for a Federally Enforceable State Operating Permit (FESOP) for its plant located at 321 E. North Street in Danville. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the renewed permit that it would propose to issue for the plant. However, before renewing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

II. SOURCE DESCRIPTION

Bunge North America, Inc. is a corn mill and grain elevator. The emission units at this plant that require an operating permit are shown in Table 1, below.

Table 1. Listing of Non-Exempt Emission Units Located at the Source.

Emission Unit and Description	Construction Date (and Date Last Modified)
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):	
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10	Prior to 1978
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96	Prior to 1970
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12	Prior to 1978
RHOMBO Truck Dump Pit #3 (5012-0003-0013) controlled by Baghouse Filters APM SJL156-6	1973
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12	Prior to 1978
RHOMBO West General Aspiration (5012-0009-0009) controlled by Baghouse Filters APM SJL72-6	1973
RHOMBO Gallery Aspiration (5012-0003-0018) controlled by Baghouse Filters APM SJL72-6	1973
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96	Prior to 1970
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30	Prior to 1978
Conveying General Aspiration (4750-0029-0015) controlled by Baghouse Filters MICROPUL 100S-6-20	Prior to 1978
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):	
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12	1985
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12	1996
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12	1996
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12	Prior to 1978

Emission Unit and Description	Construction Date (and Date Last Modified)
Dry Corn Milling, Processing and Products Handling:	
Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8	1996
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8	1996
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8	1996
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8	1996
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8	1996
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10	1996
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8	1996
~~South APM Binning (4880-0034-0035) controlled by Baghouse Filters APM 41144.12~~	~~1996~~
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60	1996
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72	1996
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96	1996
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12	1996
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A	1996
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30	1996
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200	1996
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250	1996
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12	1996
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12	1996
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12	1996
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12	1996
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12	1996
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12	1996
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12	1996
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12	1996
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D	1996
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4	1996
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4	Prior to 1970
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B	1996
AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B	1996
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100	1996
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100	1996
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100	1996
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4	1996
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4	1996
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220	1996
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220	1996
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8	1996
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4	1996
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4	1996
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4	1996
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8	1996
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7	1996
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6	1996
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100	1996
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B	1996
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1	1996
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4	1996
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B	1996
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10	1996
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8	1996
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8	1996
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8	1996
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8	1996
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B	1996
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220	1996
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220	1996
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6	1996
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30	1996
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30	1996
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30	1996
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20	1996
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6	1996
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220	1996
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1	1996
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220	1996
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120	1996
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4	1996
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4	1996
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10	1996
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B	1996
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B	1996
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4	1996
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4	1996
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30	1996
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6	1996
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6	1996
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10	1996
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220	1996
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B	1996
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30	1996
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8	1996
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8	1996
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96	1996
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12	1996
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10	1996
Round Bin General Aspiration (4750-0029-0027) controlled by Baghouse Filters APM 14072.6	Prior to 1970
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12	Prior to 1970
North and South Hominy Feed (4860-0018-0007 and 4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2	4860-0018-0007: 1982 4860-0018-0003: Prior to 1970
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8	Prior to 1970
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone	Prior to 1970
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7	1982
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8	Prior to 1970
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8	Prior to 1970
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56	Prior to 1970
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56	Prior to 1970
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE	Prior to 1970
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL	1995
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30	Prior to 1970
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter)	2015
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260)	2016
PCM Hammermill controlled by Filter System (78-03:11)	2018
USG Hammermill controlled by Filter System (78-03:27)	2018
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22)	2018
Corn Mill Products Storage:	
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96	Prior to 1970
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96	Prior to 1970
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12	Prior to 1970

Emission Unit and Description	Construction Date (and Date Last Modified)
Corn Mill Products Milling and Handling:	
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8	Prior to 1970
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4	Prior to 1970
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8	1980
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12	1981
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8	1985
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416	1985
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39	1997
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20	Prior to 1970
LTMS Truck/Rail Dump Pit (4750-0033-0000A)	1985
LTMS Truck Loadout (4750-0033-0000B)	1985
Boiler House/Grounds:	
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1)	1986
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler)	2010
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100)	Prior to 2006
One (1) Baghouse S 105 Roof Carter-Day Filter (34:86) controlling the following: One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm); One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm); One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm); One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm); One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm); One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm); Satake Sifter and Sifter Air Locks;	2022
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27);	2022

Emission Unit and Description	Construction Date (and Date Last Modified)
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01);	2022

These units are sources of emissions because Particulate Matter (PM) and Particulate Matter less than 10 microns (PM_{10}) is generated from the receiving, handling, and milling of grain at the facility. This source is also a source of Carbon Monoxide (CO) and Nitrogen Oxides (NO_x) from the combustion of fuel in the boilers and generator at this facility. NO_x is formed thermally by the combination of oxygen and nitrogen in the air at the temperatures at which fuel is burned. Thermal NO_x is formed during all common high temperature combustion processes. CO is formed from incomplete combustion of the fuel.

The following table lists annual emissions (tons) of pollutants emitted from this source, as reported in the last three Annual Emission Reports (AER) sent to the Illinois EPA:

Table 2. Actual and Potential (as limited by permit) Emissions of the Source.

Pollutant	Actual Emissions			PTE
	2018 (tons)	2019 (tons)	2020 (tons)	as limited by permit (tons/year)
Carbon Monoxide (CO)	16.5000	16.3400	17.3000	49.40
Nitrogen Oxides (NO_x)	11.9000	11.6000	11.9000	52.06
Particulate Matter (PM)	67.8000	65.8000	65.5000	69.03
Particulate Matter less than 10 Microns (PM_{10})	27.8000	28.0000	32.9000	67.86
Sulfur Dioxide (SO_2)	0.1100	0.1100	0.1300	0.51
Volatile Organic Material (VOM)	1.1900	1.1700	1.5800	3.16

This source also contains emission units and activities that are exempt from permitting under 35 Ill. Adm. Code 201.146 and the emissions from such units are not limited by the conditions of the draft permit. These emission units include:

150,000 gallon fuel oil storage tank

Based on a review of the estimated potential emissions from the exempt emission units as included in the permit application, the Illinois EPA has determined that the emissions from such exempt emission units are trivial and will not contribute to this source being a major source of emissions for any regulated pollutants emitted from any such exempt emission unit. This is because the emission limits for CO, NO_x, and PM_{10} in the draft FESOP are 90% or less of the applicable major source thresholds, and the combined PTE of the exempt emission units are less than 5% of the applicable major source thresholds, In other words, the emission limits for CO, NO_x, and PM_{10} have been limited to 90% or less of the applicable threshold (or 100 tons/year) by the draft FESOP and the combined potential to emit of the CO, NO_x, and PM_{10} from the exempt units is estimated to be less than 5% of 100 tons/year. In addition, as shown in Table 2, above, the margin of compliance between the actual emissions reported by the source during the last three years and the potential emissions as limited in the draft FESOP is more than 66% for CO, 77% for NO_x, and 56% for PM_{10}, which further minimizes the likelihood of the source exceeding its permit limits or the applicable major source thresholds.

In cases where the potential emissions of exempt emission units may contribute to the source exceeding major source thresholds (for example, if the emission limits in the FESOP are 90% or more of the applicable major source thresholds and the exempt units' PTE is 5% or more of the threshold) the Illinois EPA has established limits on such emission units in the draft FESOP that would normally be exempt from permitting. The permitting exemptions in 35 Ill. Adm. Code 201.146 do not relieve the owner or operator of any source from any obligation to comply with any other applicable requirements.

III. GENERAL DISCUSSION

FESOPs are federally enforceable, that is, the terms and conditions of the permits can be enforced by the United States Environmental Protection Agency (USEPA) under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source may operate this plant under a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need to obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for CO, NO_x, and PM_{10}. The potential emissions of other pollutants (e.g., SO_2, VOM, and Hazardous Air Pollutants) from the plant are small enough that no restrictions are needed to avoid being a major source of these pollutants.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board (Board). These emission standards represent the basic requirements for sources in Illinois. The Board has specific standards for particulate matter under 35 Ill. Adm. Code Part 212. The processing and milling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions), which limits the opacity of emissions to 30 percent, and 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units), which limits PM emissions based on each units process weight rate. The receipt and handling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions) and 35 Ill. Adm. Code Part 212 Subpart S (Agriculture), which requires the source to implement and use certain housekeeping practices to reduce particulate matter emissions and to equip the sources receiving dump pits with air pollution control equipment that is capable of at least 90% collection efficiency for PM emissions. The boilers are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions) and 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units), which limits the emissions of PM from the combustion of liquid fuel to 0.10 lb/mmBtu.

The Clayton Boiler is at this source are subject to the New Source Performance Standards (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering the NSPS in

Illinois on behalf of the United States EPA under a delegation agreement. The source also has another boiler that was constructed prior to June 9, 1989 and as result will not be subject the NSPS standards.

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) at this source are subject to the New Source Performance Standards (NSPS) for Grain Elevators, 40 CFR 60, Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. The source also has other grain receiving, cleaning and storage operations that were constructed prior to August 3, 1978 and as result will not be subject the NSPS standards.

Emergency Generator Set DG-100 at this source are subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR 63, Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

The application shows that the plant is in compliance with applicable state and federal emission standards.

V. CONTENTS OF THE PERMIT

The permit that the Illinois EPA is proposing to issue will identify the specific emission standards that apply to the emission units at the plant. As explained, the processing and milling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B, which limits the opacity of emissions to 30 percent, and 35 Ill. Adm. Code Part 212 Subpart L, which limits PM emissions based on each units process weight rate. The receipt and handling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B and 35 Ill. Adm. Code Part 212 Subpart S, which requires the source to implement and use certain housekeeping practices to reduce particulate matter emissions and to equip the sources receiving dump pits with air pollution control equipment that is capable of at least 90% collection efficiency for PM emissions. The boilers are subject to 35 Ill. Adm. Code Part 212 Subpart B and 35 Ill. Adm. Code Part 212 Subpart E, which limits the emissions of PM from the combustion of liquid fuel to 0.10 lb/mmBtu. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for CO, NO_x, and PM_{10}. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit would also set limitations on PM_{10} emissions based on the air flow to the baghouses and cyclones and the grain loading of these control devices determine by stack testing conducted at the source. The boilers are to be limited based on the types of fuel combusted and the amount of each fuel usage. These limitations are consistent with the historical operation of emission units at the plant.

The permit conditions would also continue to require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for issuance of its permit. The Illinois EPA is therefore proposing to issue the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

PERMIT CALCULATION SHEET

Facility: : Bunge North America, Inc.	**I.D.:** 183020ABT
Anal. Eng.: GB **Date:** 04-26-22	**P.N.:** 96020027
Rev. Eng.: _____ **Date:** _____	**Date Rec.:** 12/05/11

Section 1: Identify noted File Traveler Sheet and ICEMAN source information that may affect permit issuance; if active VN indicate if Compliance is ok with issuance of a permit or NOI/Denial letter:
No current violation, there was a USEPA NOV/ Soybean Processing/ Consent Decree back in 2007/2008. there doesn't seem to have been a certify investigation on file. The source is located at 321 East North Street, Danville, Vermilion County. There is also a flag for the facility because this Source is located in an E.J. area with >=70% minority population.

LEGAL:	None
FOS FLAG:	None
CROPA:	None
Other	The source is not subject to 212.302(a) or (b)

Section 2: Identify type of permit and brief summary of application/permit history if submitted in response to a NOI/Denial letter or to request revision to an existing permit:
The purpose for opening this permit is to review the application for Title V FESOP received on December, 2011. The source is requesting a Federally Enforceable State Operating Permit (FESOP) permit # 96020027 for their corn mill and grain elevator. The source requires a FESOP to limit their potential emission to less than 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matte less than 10 microns (PM_{10}). The current ICEMAN status for the above mentioned permit number #96020027 is for operating.

Section 3: Description of the source with an itemized list of emission units and pollution control equipment included in the application. If for an operating permit, list all existing and proposed units and equipment that the operating permit will need to address:
Bunge North America, Inc owns and operates a corn mill and grain elevator that creates flour and other grain mill products such as PCM and USG specialty starch binder which are used to sold to wallboard fabricators to aid in bonding paper to gypsum. The facility located at 321 East North Street, Danville, Vermilion County. This permit is granted to the above-designated Permittee to operate emission units and/or air pollution control equipment consisting of the following:

Emission Units:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
RHOMBO Truck Dump Pit #3 (5012-0003-0013) controlled by Baghouse Filters APM SJL156-6;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12;
RHOMBO West General Aspiration (5012-0009-0009) controlled by Baghouse Filters APM SJL72-6;
RHOMBO Gallery Aspiration (5012-0003-0018) controlled by Baghouse Filters APM SJL72-6;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;
Conveying General Aspiration (4750-0029-0015) controlled by Baghouse Filters MICROPUL 100S-6-20;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:
Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
~~South APM Binning (4880-0034-0035) controlled by Baghouse Filters APM 41144.12;~~

3th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
5th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;
AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;

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Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Round Bin General Aspiration (4750-0029-0027) controlled by Baghouse Filters APM 14072.6;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
North and South Hominy Feed (4860-0018-0007 and 4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);

<u>CCM260 Corn Meal Product - Baghouse S 105 Roof Carter-Day Filter (34:86) controlling the following</u>:
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm);

One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm);
Satake Sifter and Sifter Air Locks;

One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27);

One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) ;

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NOx Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM10 emissions

Section 4: Identify the proposed type(s) and maximum actual operating quantities and rates of pollutant containing materials to be used/processed/produced that will be included in permit:

The amount of grain receipts in LTMS Truck/Rail Dump Pit shall not exceeded 12,500 tons per month and 75,000 tons per year;
The amount of grain loadout in LTMS Truck Loadout shall not exceed 12,500 tons per month and 75,000 tons per year;
Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year for boiler #1;
Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year for boiler #1;
Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year for the Clayton Boiler;
Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year for the Clayton Boiler; and
Hours of Operation: 100 hours/year for Emergency Generator Set DG-100

Baghouse S 105 Roof Carter-Day Filter (34:86) flow rate 40,600dscfm, 99.9 control efficiency;
Baghouse 8th Floor Donaldson Filter (34:27) flow rate 600 dscfm;
Baghouse West MAC Filter (34:01) flow rate 740 dscfm; and
Baghouse South APM Filter (34:35) flow rate to be distributed to Baghouses 8th Floor Donaldson, West MAC, North Lunchroom, and South Lunchroom – 28,220 dscfm.

Section 5: Identify the proposed type(s), quantities and rates of maximum actual operating emissions for the source to be included in the permit including the units/controls proposed. Identify the source(s) of the emission factors used:

The proposed type, quantities and rates of maximum actual operating emissions for the source are as follow:

Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

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Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
RHOMBO Truck Dump Pit #3	0.0017	14,500	0.21	0.90
Railcar Dump Pit	0.0017	27,000	0.39	1.70
RHOMBO West General Aspiration	0.0017	6,800	0.09	0.40
RHOMBO Gallery Aspiration	0.0017	9,200	0.14	0.60
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Conveying General Aspiration	0.00085	7,600	0.05	0.24
Grain Receiving Fugitives				5.40
			Total:	14.02

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, anc 8,760 hours/year of operation.

Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, anc 8,760 hours/year of operation.

Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
~~South APM Binning~~	~~0.0006~~	~~30,000~~	~~0.15~~	~~0.68~~
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiratio	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02

CALCULATION SHEET

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expande	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Round Bin General Aspiration	0.0006	7,134	0.04	0.16
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
North Hominy Feed	0.0006	14,000	0.07	0.32
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Bin 945 Germ Receiver	0.0006	1,800	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
			Total:	28.32

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

Emissions from and operation of the corn flour/bran handling system emission units (#1 Coarse Gravity Table Aspiration Cyclone Collector (05:68), #3 Fine Gravity Table Aspiration Cyclone Collector (06:88), #1 Satake Degerminator Cyclone Collector (45:07), #1 Satake Aspiration Cyclone Collector (45:12), #2 Satake Degerminator Cyclone Collector (45:09), and #2 Satake Aspiration Cyclone Collector (45:24)) controlled by the baghouse S 105 Roof Carter-Day Filter (34:86) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (dscfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
S 105 Roof Carter-Day Filter (34:86)	0.002	40,600	0.70	3.05
			Total:	3.05

These limits are based on the maximum exhaust air flow rate, maximum grain loading, 100% capture efficiency, 99.9% control efficiency, and 8,760 hours/year of operation. The limits on PM_{10} also limit the emissions of $PM_{2.5}$.

Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

CALCULATION SHEET

Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Throughput (T/Mo)	(T/Yr)	EMISSIONS PM (lb/T)	(T/Mo)	(T/Yr)	PM_{10} (lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

Emissions from and operation of Boiler #1 shall not exceed the following limits:

Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

Emissions from the combustion of fuel oil:

Pollutant	(lbs/10^3 Gal)	Emissions (Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

Emissions from and operation of Clayton Boiler shall not exceed the following limits:

Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

Emissions from the combustion of natural gas:

Pollutant	(lbs/mmscf)	Emissions (Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

Emissions from the combustion of fuel oil:

Pollutant	(lbs/10^3 Gal)	Emissions (Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

Hours of Operation: 100 hours/year;

Emissions from the combustion of fuel oil in the Generator Sets:

CALCULATION SHEET

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	Emissions (Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

Source Emission Summary:

	EMISSIONS (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			14.02	14.02		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			28.32	28.32		
Corn Flour/Bran Handling System			3.05	3.05		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	69.03	67.86	0.51	3.16

Section 6: Identify the source's potential-to-emit (PTE) including any proposed additions/revisions. Show calculations or reference where ir application or file PTE is satisfactorily presented. Emissions from 35 IAC 201.146 exempt units must be included in PTE calculations:

The source's potential-to-emit (PTE), including any construction construction permit thaty has previously been issued indicates that this source had been a CAAPP source, and is requesting to be issued a FESOP to limit the emissions of air pollutants from the source to less than major source thresholds, the FESOP containing federally enforceable limits in the form of permit conditions which effectively restrict the potential emissions of a source to below major source threshold, thereby excluding the source from the CAAPP.

There have been the following construction permits granted since the FESOP App was received December 5, 2011 (11110009, 15100009, 16030026, 18050016, and 22040008).

Section 7: List potentially applicable State and Federal (NSPS and NESHAP) regulations and indicate if application demonstrated those regulations would not be violated by construction and/or operation of equipment/units/processes in application:
Following is a list of potentially applicable State and Federal (NSPS and NESHAP) regulations and exemptions:

Applicable Regulations:
1) 35 Ill Adm. Code 212.123 no visible of PM with opacity greater than 30 percent.
2) 35 Ill. Adm. Code 212.206. no emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu)
3) 35 Ill Adm. Code 212.301 no emissions beyond property line
4) 35 Ill Adm. Code 212.321, 322 process emission rate, applies to milling process.
5) 35 Ill Adm. Code 212.461 grain handling and drying in general
6) 35 Ill Adm. Code 212.462 grain handling operations
7) 35 Ill. Adm. Code 212.463 grain-drying operations for which construction or modification commenced prior to June 30, 1975
8) 35 Ill. Adm. Code 214.122(b)(2), New Fuel Combustion Emission Sources,
9) 35 Ill. Adm. Code 214.301, Process Emission Sources
10) 35 Ill. Adm. Code 215.301 Use of Organic Material,
11) 35 Ill. Adm. Code 216.121 the steam boiler is subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources).
12) New Source Performance Standards (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc for steam boiler 10mmBtu/hr or greater
13) NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD,
14) National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ.

Section 8: Conclusions and recommendations. Indicate your final recommendation (e.g., NOI, denial, issue permit with conditions, etc.) and indicate reason(s) for that action:
It is recommended that a FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE be issue after a draft of this FESOP permit has undergone a public notice period.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
RHOMBO Truck Dump Pit #3 (5012-0003-0013) controlled by Baghouse Filters APM SJL156-6;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12;
RHOMBO West General Aspiration (5012-0009-0009) controlled by Baghouse Filters APM SJL72-6;
RHOMBO Gallery Aspiration (5012-0003-0018) controlled by Baghouse Filters APM SJL72-6;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;
Conveying General Aspiration (4750-0029-0015) controlled by Baghouse Filters MICROPUL 100S-6-20;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
~~South APM Binning (4880-0034-0035) controlled by Baghouse Filters APM~~ 41144.12;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;

AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;
AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;

Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;

#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Round Bin General Aspiration (4750-0029-0027) controlled by Baghouse Filters APM 14072.6;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
North and South Hominy Feed (4860-0018-0007 and 4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);

One (1) Baghouse S 105 Roof Carter-Day Filter (34:86) controlling the following:

One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm);
Satake Sifter and Sifter Air Locks;

One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27);

One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice

requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products

Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to

the fullest extent which is technologically and economically feasible.

1. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

   i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

   ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

      A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

      B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

   iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

   iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits

pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based

water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with

safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

   An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change

the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as

described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility)

when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 80.510(b), beginning June 1, 2010. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all nonroad (NR) and locomotive (LM) diesel fuel is subject to the following per-gallon standards:

i. Sulfur content 15 ppm maximum for NR diesel fuel.

ii. Cetane index or aromatic content, as follows:

A. A minimum cetane index of 40; or

B. A maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. The Fugitive Particulate Operating Program, as submitted by the Permittee on DATE PROGRAM APPROVED BY FOS WAS RECEIVED is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
RHOMBO Truck Dump Pit #3	0.0017	14,500	0.21	0.90
Railcar Dump Pit	0.0017	27,000	0.39	1.70
RHOMBO West General Aspiration	0.0017	6,800	0.09	0.40
RHOMBO Gallery Aspiration	0.0017	9,200	0.14	0.60
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Conveying General Aspiration	0.00085	7,600	0.05	0.24
Grain Receiving Fugitives				5.40
			Total:	14.02

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
~~South APM Binning~~	~~0.0006~~	~~30,000~~	~~0.15~~	~~0.68~~
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Round Bin General Aspiration	0.0006	7,134	0.04	0.16
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
North Hominy Feed	0.0006	14,000	0.07	0.32
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Bin 945 Germ Receiver	0.0006	1,800	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
			Total:	28.32

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the corn flour/bran handling system emission units (#1 Coarse Gravity Table Aspiration Cyclone Collector (05:68), #3 Fine Gravity Table Aspiration Cyclone Collector (06:88), #1 Satake Degerminator Cyclone Collector (45:07), #1 Satake Aspiration Cyclone Collector (45:12), #2 Satake Degerminator Cyclone Collector (45:09), and #2 Satake Aspiration Cyclone Collector (45:24)) controlled

by the baghouse S 105 Roof Carter-Day Filter (34:86) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (dscfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
S 105 Roof Carter-Day Filter (34:86)	0.002	40,600	0.70	3.05

These limits are based on the maximum exhaust air flow rate, maximum grain loading, 100% capture efficiency, 99.9% control efficiency, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Throughput (T/Mo)	(T/Yr)	(lb/T)	E M I S S I O N S PM (T/Mo)	(T/Yr)	(lb/T)	PM_{10} (T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

g. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

i. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

j. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original

test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control

equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Condition 22 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40

CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

24. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

25a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

26a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a

contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

27. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

28a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance

Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

29. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

30a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

31a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

   A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

   B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 31(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

32. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

33a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major

source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

i. An existing stationary CI RICE located at an area source of HAP emissions.

ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in CFR 63.6650(h)(2)(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is

specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during

the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

34. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

35a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

36a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			14.02	14.02		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			28.32	28.32		
Corn Flour/Bran Handling System			3.05	3.05		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	69.03	67.86	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Kras, Kim

From: Bernoteit, Bob
Sent: Thursday, April 28, 2022 1:26 PM
To: Barria, German
Subject: RE: Bunge North America, Inc. ID #183020ABT

German,

Please bring me the construction permit application file. Thank you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, April 26, 2022 4:59 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. ID #183020ABT

Bob,

Please find drafts construction and FESOP for your review.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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Kras, Kim

From: James Burris <James.Burris@bunge.com>
Sent: Tuesday, May 3, 2022 9:54 AM
To: Barria, German
Cc: Bernoteit, Bob; Michelle Bublitz
Subject: [External] RE: Bunge North America, In. - ID: 183020ABT

German,

We have had a chance to review your email related to our pending FESOP permit, your request for a fugitive dust plan, our recent application for a construction permit and your request for Bunge to evaluate opportunities to reduce its permitted emissions as an offset to the increase in the construction permit application. Bunge would like to address each of these points individually.

1) Bunge proposes to perform a complete review of the draft FESOP and provide IEPA with comments no later than September 1, 2022.
2) Along with the review of the FESOP, Bunge will prepare and submit a fugitive dust plan for the Danville facility no later than September 1, 2022.
3) Bunge will evaluate opportunities to reduce its permitted emissions by at least the amount of the proposed increase in the construction permit application and submit the necessary construction permit applications to enact the changes necessary to realize the permitted emission reductions and subsequently incorporate the changes into the facility's operating permit.
4) Bunge requests that IEPA proceed with the review of the construction permit application while we work on the tasks 1, 2 and 3. The effort to complete them will take time and Bunge does not want this to delay your review or the issuance of the construction permit. It is important to Bunge that the facility can start construction as soon as possible.

Bunge appreciates your consideration of our proposal. Please contact me with any questions.

Thank you,

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, April 13, 2022 10:03 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, In. - ID: 183020ABT

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Good morning Mr. Burris,
We received an application for a construction permit (App No. 22040008) on April 8, 2022. We also sent Bunge a draft of their FESOP back in June 1, 2021 for their review, as well as we requested a fugitive dust plan.
We will need a fugitive dust plan in order to process this application for construction.
Further, this source is located in an Environmental Justice Area (E.J), as so, IEPA has been requesting applicant for construction permit to what emission limits they request in construction permit, to offset them in their source overall operating permit limits. In this application Bunge proposes a permit limit for the S 105 Roof Carter-Day Filter of PM/PM10: 3.05 tons/year, PM2.5: 1.52 tons/year, we will like to see that been reduced in some where else in the limits that are proposed in the draft FESOP.

Please don't hesitate to contact me if you have any questions.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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If you are not the intended recipient, you must not use, disclose, distribute or copy any part of this message.

Kras, Kim

From: Barria, German
Sent: Tuesday, June 7, 2022 2:44 PM
To: Bernoteit, Bob
Subject: Bunge North America, Inc. - ID #183020ABT
Attachments: EJ Clearance Memo (Bunge Grain Milling).docx; 96020027 - Bunge North America Inc. (Project Summary) - 06-03-2022.docx; 96020027 - Bunge North America Inc - FESOP - 06-03-2022.docx; 22040008 Bunge Grain Milling Inc. - Const Permit - 06-03-2022.docx

Bob,
Here is the E.J. memo for this source construction permit.
Both the draft permit construction and FESOP, as well as the revised project summary, are attached here with new date, but are the same drafts as the one I send you a while back.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
1021 N. Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

Project Summary
Proposed Federally Enforceable State Operating Permit (FESOP)
Bunge North America, Inc.
Danville, Vermilion County, Illinois

Site Identification No.: 183020ABT
Application No.: 96020027

Schedule
Public Comment Period Begins:
Public Comment Period Closes:

Illinois EPA Contacts
Permit Analyst: German Barria
Community Relations Coordinator: Brad Frost
217/782-7027
Brad.Frost@illinois.gov

I. INTRODUCTION

Bunge North America, Inc. has applied for a Federally Enforceable State Operating Permit (FESOP) for its plant located at 321 E. North Street in Danville. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the renewed permit that it would propose to issue for the plant. However, before renewing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

II. SOURCE DESCRIPTION

Bunge North America, Inc. is a corn mill and grain elevator. The emission units at this plant that require an operating permit are shown in Table 1, below.

Table 1. Listing of Non-Exempt Emission Units Located at the Source.

Emission Unit and Description	Construction Date (and Date Last Modified)
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):	
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10	Prior to 1978
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96	Prior to 1970
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12	Prior to 1978
RHOMBO Truck Dump Pit #3 (5012-0003-0013) controlled by Baghouse Filters APM SJL156-6	1973
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12	Prior to 1978
RHOMBO West General Aspiration (5012-0009-0009) controlled by Baghouse Filters APM SJL72-6	1973
RHOMBO Gallery Aspiration (5012-0003-0018) controlled by Baghouse Filters APM SJL72-6	1973
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96	Prior to 1970
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30	Prior to 1978
Conveying General Aspiration (4750-0029-0015) controlled by Baghouse Filters MICROPUL 100S-6-20	Prior to 1978
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):	
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12	1985
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12	1996
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12	1996
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12	Prior to 1978

Emission Unit and Description	Construction Date (and Date Last Modified)
Dry Corn Milling, Processing and Products Handling:	
Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8	1996
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8	1996
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8	1996
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8	1996
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8	1996
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10	1996
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8	1996
~~South APM Binning (4880-0034-0035) controlled by Baghouse Filters APM 41144.12~~	~~1996~~
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60	1996
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72	1996
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96	1996
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12	1996
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A	1996
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30	1996
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200	1996
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250	1996
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12	1996
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12	1996
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12	1996
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12	1996
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12	1996
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12	1996
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12	1996
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12	1996
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D	1996
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4	1996
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4	Prior to 1970
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B	1996
AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B	1996
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100	1996
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100	1996
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100	1996
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4	1996
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4	1996
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220	1996
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220	1996
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8	1996
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4	1996
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4	1996
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4	1996
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8	1996
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7	1996
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6	1996
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100	1996
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B	1996
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1	1996
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4	1996
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B	1996
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10	1996
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8	1996
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8	1996
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8	1996
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8	1996
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B	1996
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220	1996
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220	1996
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6	1996
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30	1996
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30	1996
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30	1996
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20	1996
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6	1996
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220	1996
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1	1996
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220	1996
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120	1996
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4	1996
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4	1996
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10	1996
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B	1996
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B	1996
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4	1996
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4	1996
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30	1996
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6	1996
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6	1996
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10	1996
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220	1996
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B	1996
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30	1996
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8	1996
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8	1996
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96	1996
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12	1996
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10	1996
Round Bin General Aspiration (4750-0029-0027) controlled by Baghouse Filters APM 14072.6	Prior to 1970
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12	Prior to 1970
North and South Hominy Feed (4860-0018-0007 and 4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2	4860-0018-0007: 1982 4860-0018-0003: Prior to 1970
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8	Prior to 1970
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone	Prior to 1970
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7	1982
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8	Prior to 1970
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8	Prior to 1970
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56	Prior to 1970
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56	Prior to 1970
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE	Prior to 1970
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL	1995
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30	Prior to 1970
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter)	2015
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260)	2016
PCM Hammermill controlled by Filter System (78-03:11)	2018
USG Hammermill controlled by Filter System (78-03:27)	2018
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22)	2018
Corn Mill Products Storage:	
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96	Prior to 1970
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96	Prior to 1970
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12	Prior to 1970

Emission Unit and Description	Construction Date (and Date Last Modified)
Corn Mill Products Milling and Handling:	
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8	Prior to 1970
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4	Prior to 1970
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8	1980
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12	1981
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8	1985
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416	1985
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39	1997
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20	Prior to 1970
LTMS Truck/Rail Dump Pit (4750-0033-0000A)	1985
LTMS Truck Loadout (4750-0033-0000B)	1985
Boiler House/Grounds:	
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1)	1986
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler)	2010
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100)	Prior to 2006
One (1) Baghouse S 105 Roof Carter-Day Filter (34:86) controlling the following: One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm); One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm); One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm); One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm); One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm); One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm); Satake Sifter and Sifter Air Locks;	2022
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27);	2022

Emission Unit and Description	Construction Date (and Date Last Modified)
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01);	2022

These units are sources of emissions because Particulate Matter (PM) and Particulate Matter less than 10 microns (PM_{10}) is generated from the receiving, handling, and milling of grain at the facility. This source is also a source of Carbon Monoxide (CO) and Nitrogen Oxides (NO_x) from the combustion of fuel in the boilers and generator at this facility. NO_x is formed thermally by the combination of oxygen and nitrogen in the air at the temperatures at which fuel is burned. Thermal NO_x is formed during all common high temperature combustion processes. CO is formed from incomplete combustion of the fuel.

The following table lists annual emissions (tons) of pollutants emitted from this source, as reported in the last three Annual Emission Reports (AER) sent to the Illinois EPA:

Table 2. Actual and Potential (as limited by permit) Emissions of the Source.

Pollutant	Actual Emissions			PTE
	2018 (tons)	**2019** (tons)	**2020** (tons)	**as limited by permit** (tons/year)
Carbon Monoxide (CO)	16.5000	16.3400	17.3000	49.40
Nitrogen Oxides (NO_x)	11.9000	11.6000	11.9000	52.06
Particulate Matter (PM)	67.8000	65.8000	65.5000	69.03
Particulate Matter less than 10 Microns (PM_{10})	27.8000	28.0000	32.9000	67.86
Sulfur Dioxide (SO_2)	0.1100	0.1100	0.1300	0.51
Volatile Organic Material (VOM)	1.1900	1.1700	1.5800	3.16

This source also contains emission units and activities that are exempt from permitting under 35 Ill. Adm. Code 201.146 and the emissions from such units are not limited by the conditions of the draft permit. These emission units include:

150,000 gallon fuel oil storage tank

Based on a review of the estimated potential emissions from the exempt emission units as included in the permit application, the Illinois EPA has determined that the emissions from such exempt emission units are trivial and will not contribute to this source being a major source of emissions for any regulated pollutants emitted from any such exempt emission unit. This is because the emission limits for CO, NO_x, and PM_{10} in the draft FESOP are 90% or less of the applicable major source thresholds, and the combined PTE of the exempt emission units are less than 5% of the applicable major source thresholds, In other words, the emission limits for CO, NO_x, and PM_{10} have been limited to 90% or less of the applicable threshold (or 100 tons/year) by the draft FESOP and the combined potential to emit of the CO, NO_x, and PM_{10} from the exempt units is estimated to be less than 5% of 100 tons/year. In addition, as shown in Table 2, above, the margin of compliance between the actual emissions reported by the source during the last three years and the potential emissions as limited in the draft FESOP is more than 66% for CO, 77% for NO_x, and 56% for PM_{10}, which further minimizes the likelihood of the source exceeding its permit limits or the applicable major source thresholds.

In cases where the potential emissions of exempt emission units may contribute to the source exceeding major source thresholds (for example, if the emission limits in the FESOP are 90% or more of the applicable major source thresholds and the exempt units' PTE is 5% or more of the threshold) the Illinois EPA has established limits on such emission units in the draft FESOP that would normally be exempt from permitting. The permitting exemptions in 35 Ill. Adm. Code 201.146 do not relieve the owner or operator of any source from any obligation to comply with any other applicable requirements.

III. GENERAL DISCUSSION

FESOPs are federally enforceable, that is, the terms and conditions of the permits can be enforced by the United States Environmental Protection Agency (USEPA) under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source may operate this plant under a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need to obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for CO, NO_x, and PM_{10}. The potential emissions of other pollutants (e.g., SO_2, VOM, and Hazardous Air Pollutants) from the plant are small enough that no restrictions are needed to avoid being a major source of these pollutants.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board (Board). These emission standards represent the basic requirements for sources in Illinois. The Board has specific standards for particulate matter under 35 Ill. Adm. Code Part 212. The processing and milling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions), which limits the opacity of emissions to 30 percent, and 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units), which limits PM emissions based on each units process weight rate. The receipt and handling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions) and 35 Ill. Adm. Code Part 212 Subpart S (Agriculture), which requires the source to implement and use certain housekeeping practices to reduce particulate matter emissions and to equip the sources receiving dump pits with air pollution control equipment that is capable of at least 90% collection efficiency for PM emissions. The boilers are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions) and 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units), which limits the emissions of PM from the combustion of liquid fuel to 0.10 lb/mmBtu.

The Clayton Boiler is at this source are subject to the New Source Performance Standards (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering the NSPS in

Illinois on behalf of the United States EPA under a delegation agreement. The source also has another boiler that was constructed prior to June 9, 1989 and as result will not be subject the NSPS standards.

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) at this source are subject to the New Source Performance Standards (NSPS) for Grain Elevators, 40 CFR 60, Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. The source also has other grain receiving, cleaning and storage operations that were constructed prior to August 3, 1978 and as result will not be subject the NSPS standards.

Emergency Generator Set DG-100 at this source are subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR 63, Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

The application shows that the plant is in compliance with applicable state and federal emission standards.

V. CONTENTS OF THE PERMIT

The permit that the Illinois EPA is proposing to issue will identify the specific emission standards that apply to the emission units at the plant. As explained, the processing and milling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B, which limits the opacity of emissions to 30 percent, and 35 Ill. Adm. Code Part 212 Subpart L, which limits PM emissions based on each units process weight rate. The receipt and handling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B and 35 Ill. Adm. Code Part 212 Subpart S, which requires the source to implement and use certain housekeeping practices to reduce particulate matter emissions and to equip the sources receiving dump pits with air pollution control equipment that is capable of at least 90% collection efficiency for PM emissions. The boilers are subject to 35 Ill. Adm. Code Part 212 Subpart B and 35 Ill. Adm. Code Part 212 Subpart E, which limits the emissions of PM from the combustion of liquid fuel to 0.10 lb/mmBtu. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for CO, NO_x, and PM_{10}. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit would also set limitations on PM_{10} emissions based on the air flow to the baghouses and cyclones and the grain loading of these control devices determine by stack testing conducted at the source. The boilers are to be limited based on the types of fuel combusted and the amount of each fuel usage. These limitations are consistent with the historical operation of emission units at the plant.

The permit conditions would also continue to require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for issuance of its permit. The Illinois EPA is therefore proposing to issue the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
RHOMBO Truck Dump Pit #3 (5012-0003-0013) controlled by Baghouse Filters APM SJL156-6;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12;
RHOMBO West General Aspiration (5012-0009-0009) controlled by Baghouse Filters APM SJL72-6;
RHOMBO Gallery Aspiration (5012-0003-0018) controlled by Baghouse Filters APM SJL72-6;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;
Conveying General Aspiration (4750-0029-0015) controlled by Baghouse Filters MICROPUL 100S-6-20;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;

Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;

Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;

Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;

Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;

East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;

West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;

~~South APM Binning (4880-0034-0035) controlled by Baghouse Filters APM~~ 41144.12;

8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;

9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;

Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;

Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;

Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;

Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;

6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;

West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;

South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;

South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;

North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;

North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;

Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;

CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;

Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;

Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;

Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;

Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;

GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;

Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;

AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;
AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;

Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;

#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Round Bin General Aspiration (4750-0029-0027) controlled by Baghouse Filters APM 14072.6;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
North and South Hominy Feed (4860-0018-0007 and 4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout ,(4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);

One (1) Baghouse S 105 Roof Carter-Day Filter (34:86) controlling the following:

One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm);
Satake Sifter and Sifter Air Locks;

One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27);

One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice

requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products

Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to

the fullest extent which is technologically and economically feasible.

1. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

   i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

   ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

      A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

      B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

   iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

   iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits

pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based

water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with

safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

   An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change

the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as

described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility)

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. The Fugitive Particulate Operating Program, as submitted by the Permittee on DATE PROGRAM APPROVED BY FOS WAS RECEIVED is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
RHOMBO Truck Dump Pit #3	0.0017	14,500	0.21	0.90
Railcar Dump Pit	0.0017	27,000	0.39	1.70
RHOMBO West General Aspiration	0.0017	6,800	0.09	0.40
RHOMBO Gallery Aspiration	0.0017	9,200	0.14	0.60
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Conveying General Aspiration	0.00085	7,600	0.05	0.24
Grain Receiving Fugitives				5.40
			Total:	14.02

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
~~South APM Binning~~	~~0.0006~~	~~30,000~~	~~0.15~~	~~0.68~~
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Gonditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Round Bin General Aspiration	0.0006	7,134	0.04	0.16
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
North Hominy Feed	0.0006	14,000	0.07	0.32
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Bin 945 Germ Receiver	0.0006	1,800	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
			Total:	28.32

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the corn flour/bran handling system emission units (#1 Coarse Gravity Table Aspiration Cyclone Collector (05:68), #3 Fine Gravity Table Aspiration Cyclone Collector (06:88), #1 Satake Degerminator Cyclone Collector (45:07), #1 Satake Aspiration Cyclone Collector (45:12), #2 Satake Degerminator Cyclone Collector (45:09), and #2 Satake Aspiration Cyclone Collector (45:24)) controlled

by the baghouse S 105 Roof Carter-Day Filter (34:86) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (dscfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
S 105 Roof Carter-Day Filter (34:86)	0.002	40,600	0.70	3.05

These limits are based on the maximum exhaust air flow rate, maximum grain loading, 100% capture efficiency, 99.9% control efficiency, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

	Throughput			E M I S S I O N S PM			PM_{10}	
Emission Unit	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

g. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

i. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

j. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original

test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control

equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Condition 22 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40

CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

24. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

25a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

26a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a

contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

27. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

28a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance

Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

29. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

30a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

31a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

   A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

   B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 31(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

32. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

33a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major

source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

   i. An existing stationary CI RICE located at an area source of HAP emissions.

   ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 4 CFR 63.6650(h)(2)(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

   i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is

specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during

the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

34. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

35a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

36a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			14.02	14.02		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			28.32	28.32		
Corn Flour/Bran Handling System			3.05	3.05		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	69.03	67.86	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Kras, Kim

From: Barria, German
Sent: Monday, June 13, 2022 3:11 PM
To: Bernoteit, Bob
Subject: FW: Bunge

Bob,

Which one of those time will work for you for a call

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Monday, June 13, 2022 3:01 PM
To: Barria, German <German.Barria@Illinois.gov>
Subject: [External] RE: Bunge

German,

I am available tomorrow (Tuesday) any time after 1:00pm central, Wednesday any time after 1:00pm central, Thursday, any time after 10:00am central and am not available on Friday.

I can accept a Team invitation or just let me know when you plan to call me.

Thank you,

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 13, 2022 2:31 PM
To: James Burris <James.Burris@bunge.com>
Subject: Bunge

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CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Hi Mr. Burris,
Sorry to have miss your call, regarding your inquiring about the construction permit application status.
Like I mentioned previously, a draft of both the Construction permit and FESOP have been done and are under internal review.
we can set up a call, between Bunge and permit section, my manager would like to discuss the situations about permitting.

Let me know what times would work for this week. Tue - Fri

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

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If you are not the intended recipient, you must not use, disclose, distribute or copy any part of this message.

Kras, Kim

From: Bernoteit, Bob
Sent: Monday, June 13, 2022 3:12 PM
To: Barria, German
Subject: RE: Bunge

We can do tomorrow morning.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 13, 2022 3:11 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: FW: Bunge

Bob,

Which one of those time will work for you for a call

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Monday, June 13, 2022 3:01 PM
To: Barria, German <German.Barria@Illinois.gov>
Subject: [External] RE: Bunge

German,

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I can accept a Team invitation or just let me know when you plan to call me.

Thank you,

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904

1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 13, 2022 2:31 PM
To: James Burris <James.Burris@bunge.com>
Subject: Bunge

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CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Hi Mr. Burris,
Sorry to have miss your call, regarding your inquiring about the construction permit application status.
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Let me know what times would work for this week. Tue - Fri

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

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If you received this message in error, please notify us immediately by telephone at +1 314 292-2000 and immediately delete this message from your system.
If you are not the intended recipient, you must not use, disclose, distribute or copy any part of this message.

Kras, Kim

From: Barria, German
Sent: Monday, June 13, 2022 3:16 PM
To: Bernoteit, Bob
Subject: RE: Bunge

Mr. Burris can't in the morning tomorrow or Wednesday, but Thursday he can

"I am available tomorrow (Tuesday) any time after 1:00pm central, Wednesday any time after 1:00pm central, Thursday, any time after 10:00am central and am not available on Friday."

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Monday, June 13, 2022 3:12 PM
To: Barria, German <German.Barria@Illinois.gov>
Subject: RE: Bunge

We can do tomorrow morning.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 13, 2022 3:11 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: FW: Bunge

Bob,

Which one of those time will work for you for a call

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Monday, June 13, 2022 3:01 PM
To: Barria, German <German.Barria@Illinois.gov>
Subject: [External] RE: Bunge

German,

I am available tomorrow (Tuesday) any time after 1:00pm central, Wednesday any time after 1:00pm central, Thursday, any time after 10:00am central and am not available on Friday.

I can accept a Team invitation or just let me know when you plan to call me.

Thank you,

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 13, 2022 2:31 PM
To: James Burris <James.Burris@bunge.com>
Subject: Bunge

WARNING: The sender of this email could not be validated and may not match the person in the "From" field.

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Hi Mr. Burris,
Sorry to have miss your call, regarding your inquiring about the construction permit application status.
Like I mentioned previously, a draft of both the Construction permit and FESOP have been done and are under internal review.
we can set up a call, between Bunge and permit section, my manager would like to discuss the situations about permitting.

Let me know what times would work for this week. Tue - Fri

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

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Kras, Kim

From: Bernoteit, Bob
Sent: Monday, June 13, 2022 3:22 PM
To: Barria, German
Subject: Accepted: Bunge Call

Kras, Kim

From: Bernoteit, Bob
Sent: Tuesday, June 21, 2022 4:14 PM
To: Barria, German
Subject: RE: Bunge North America, Inc. - ID #183020ABT
Attachments: 96020027a - Bunge North America, Inc..docx; 22040008 - Bunge North America, Inc..docx

German,

Please see the attached for my comments on this draft construction permit and draft FESOP. Thank you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, June 7, 2022 2:44 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. - ID #183020ABT

Bob,
Here is the E.J. memo for this source construction permit.
Both the draft permit construction and FESOP, as well as the revised project summary, are attached here with new date, but are the same drafts as the one I send you a while back.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
RHOMBO Truck Dump Pit #3 (5012-0003-0013) controlled by Baghouse Filters APM SJL156-6;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12;
RHOMBO West General Aspiration (5012-0009-0009) controlled by Baghouse Filters APM SJL72-6;
RHOMBO Gallery Aspiration (5012-0003-0018) controlled by Baghouse Filters APM SJL72-6;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;
Conveying General Aspiration (4750-0029-0015) controlled by Baghouse Filters MICROPUL 100S-6-20;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;

Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:
Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
~~South APM Binning (4880-0034-0035) controlled by Baghouse Filters APM 41144.12;~~
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;

Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;
AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;

Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;

3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Round Bin General Aspiration (4750-0029-0027) controlled by Baghouse Filters APM 14072.6;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
North and South Hominy Feed (4860-0018-0007 and 4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);

~~One (1) Baghouse S 105 Roof Carter-Day Filter (34:86) controlling the following:~~

One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:

Formatted: Indent: Left: 0", Hanging: 0.5"

One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification

from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The

Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm.

Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn,

Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305~~80.510(b)~~ for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three

parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary

RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR ~~80.510~~1090.305(~~b~~a), except as specified in 40 CFR 1090.300(a), ~~beginning June 1, 2010. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all nonroad (NR) and locomotive (LM)~~ diesel fuel must meet the ULSD~~is subject to the following~~ per-gallon standards~~:~~ of 40 CFR 1090.305.

~~i~~ b. Pursuant to 40 CFR 1090.305(b), Maximum sSulfur content of 15 ppm ~~maximum for NR diesel fuel~~.

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~~ii~~ c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the ~~Cetane index or aromatic content, as~~ following standards:

~~A~~i. ~~A minimum~~ Minimum cetane index of 40~~; or~~.

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~~B~~ii. ~~A maximum~~ Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable

requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

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k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

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l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. The Fugitive Particulate Operating Program, as submitted by the Permittee on DATE PROGRAM APPROVED BY FOS WAS RECEIVED is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
RHOMBO Truck Dump Pit #3	0.0017	14,500	0.21	0.90
Railcar Dump Pit	0.0017	27,000	0.39	1.70
RHOMBO West General Aspiration	0.0017	6,800	0.09	0.40
RHOMBO Gallery Aspiration	0.0017	9,200	0.14	0.60
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Conveying General Aspiration	0.00085	7,600	0.05	0.24
Grain Receiving Fugitives				5.40
			Total:	14.02

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
~~South-APM-Binning~~	~~0.0006~~	~~30,000~~	~~0.15~~	~~0.68~~
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Round Bin General Aspiration	0.0006	7,134	0.04	0.16
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
North Hominy Feed	0.0006	14,000	0.07	0.32
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Bin 945 Germ Receiver	0.0006	1,800	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05
			Total:	~~28.32~~31.37

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These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

~~d. Emissions from and operation of the corn flour/bran handling system emission units (#1 Coarse Gravity Table Aspiration Cyclone Collector (05:68), #3 Fine Gravity Table Aspiration Cyclone Collector (06:88), #1 Satake Degerminator Cyclone Collector (45:07), #1 Satake Aspiration Cyclone Collector (45:12), #2 Satake Degerminator Cyclone Collector (45:09), and #2 Satake Aspiration Cyclone Collector (45:24)) controlled by the baghouse S 105 Roof Carter-Day Filter (34:86) shall not exceed the following limits:~~

~~Emission Unit~~	~~Grain Loading (gr/dscf)~~	~~Total Flow Rate (dscfm)~~	~~E M I S S I O N S PM & PM_{10} (lbs/Hour)~~	~~(Tons/Yr)~~
~~S 105 Roof Carter-Day Filter (34:86)~~	~~0.002~~	~~40,600~~	~~0.70~~	~~3.05~~

~~These limits are based on the maximum exhaust air flow rate, maximum grain loading, 100% capture efficiency, 99.9% control efficiency, and 8,760 hours/year of operation.~~

e d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

fe. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Throughput (T/Mo)	(T/Yr)	E M I S S I O N S PM (lb/T)	(T/Mo)	(T/Yr)	PM_{10} (lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03

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	Throughput			E M I S S I O N S PM			PM_{10}	
Emission Unit	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

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These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

gf. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

hg. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

+h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

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Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	Emissions (Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08

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Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	Emissions (Tons/Year)
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

ii. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in

this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall

consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil

sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be

conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn,

Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: (refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points,

sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

245. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

256a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

267a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

278. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

289a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in ~~40 CFR 63.6640(f)(2)(ii) or (iii) or~~ 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

~~29~~30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

~~30~~31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

3~~2~~a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 3~~2~~(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

3~~2~~3. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

3~~3~~4a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or

reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

   i. An existing stationary CI RICE located at an area source of HAP emissions.

   ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR

63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

34. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

35a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

36a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a

copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			14.02	14.02		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			28.32	28.32		
Corn Flour/Bran Handling System			3.05	3.05		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set						
DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	69.03	67.86	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		——Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		——Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		——Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Kras, Kim

From: Barria, German
Sent: Wednesday, June 22, 2022 11:10 AM
To: 'James Burris'
Cc: Bernoteit, Bob
Subject: Bunge North America, Inc. ID #183020ABT
Attachments: 96020027 - Bunge North America Inc - FESOP - 06-22-2022.docx; 22040008 - Bunge North America Inc - 06-22-2022.docx

Mr. Burris,

Please find attached a draft of the proposed construction permit, and draft FESOP.
Note that there is a place holder for the fugitive dust plan receival date.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
RHOMBO Truck Dump Pit #3 (5012-0003-0013) controlled by Baghouse Filters APM SJL156-6;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12;
RHOMBO West General Aspiration (5012-0009-0009) controlled by Baghouse Filters APM SJL72-6;
RHOMBO Gallery Aspiration (5012-0003-0018) controlled by Baghouse Filters APM SJL72-6;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;
Conveying General Aspiration (4750-0029-0015) controlled by Baghouse Filters MICROPUL 100S-6-20;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;

Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:
Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;

GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;
AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;

Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;

Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Round Bin General Aspiration (4750-0029-0027) controlled by Baghouse Filters APM 14072.6;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
North and South Hominy Feed (4860-0018-0007 and 4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);

USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);

One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60. 300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE

located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20

	Metric	English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in

unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

1. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a),

212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

   An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is

greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE

under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential

voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 1090.305(a), except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305.

b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.

c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:

i. Minimum cetane index of 40.

ii. Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. The Fugitive Particulate Operating Program, as submitted by the Permittee on DATE PROGRAM APPROVED BY FOS WAS RECEIVED is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
RHOMBO Truck Dump Pit #3	0.0017	14,500	0.21	0.90
Railcar Dump Pit	0.0017	27,000	0.39	1.70
RHOMBO West General Aspiration	0.0017	6,800	0.09	0.40
RHOMBO Gallery Aspiration	0.0017	9,200	0.14	0.60
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Conveying General Aspiration	0.00085	7,600	0.05	0.24
Grain Receiving Fugitives				5.40
			Total:	14.02

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #[illegible] Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Round Bin General Aspiration	0.0006	7,134	0.04	0.16
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
North Hominy Feed	0.0006	14,000	0.07	0.32
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Bin 945 Germ Receiver	0.0006	1,800	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05
			Total:	31.37

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Throughput (T/Mo)	(T/Yr)	EMISSIONS PM (lb/T)	(T/Mo)	(T/Yr)	PM_{10} (lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03

	Throughput			E M I S S I O N S				
				PM			PM_{10}	
Emission Unit	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

		Emissions	
Pollutant	(lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

		Emissions	
Pollutant	(lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	Emissions (Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	Emissions (Tons/Year)
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in

this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall

consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil

sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be

conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn,

Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points,

sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

25. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

26a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

27a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

28. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

29a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 32(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

33. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

34a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or

reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

   i. An existing stationary CI RICE located at an area source of HAP emissions.

   ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR

63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

35. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

36a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

37a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a

copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			14.02	14.02		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			28.32	28.32		
Corn Flour/Bran Handling System			3.05	3.05		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	69.03	67.86	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Kras, Kim

From: James Burris <James.Burris@bunge.com>
Sent: Thursday, June 23, 2022 8:07 AM
To: Barria, German
Cc: Bernoteit, Bob; Michelle Bublitz
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

German,

I met with personnel from the Danville plant yesterday and we have identified additional emission sources that Bunge can remove from service as part of the air Construction Permit application. This will bring the net change in emissions from the permitting action to a net zero or lower. Per our discussion this will allow IEPA to issue the construction permit by the 90 day deadline without needed to having to rush through the FESOP review and also eliminate references/conditions related to the Fugitive Dust Plan in the Construction Permit. Nonetheless, as we discussed, Bunge will continue to review the FESOP draft and work on a Fugitive Dust Plan. Bunge will submit the Fugitive Dust Plan and our comments on the Draft FESOP to IEPA by September 1, 2022.

Bunge plans to have an addendum to the Construction Permit application submitted to you today or tomorrow. The addendum will identify the emission sources being removed from service and the corresponding "Project" emissions showing a net negative emissions increase. Bunge will email you a pdf of the addendum while also overnighting two hard copies to IEPA's permit section.

Please let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 22, 2022 11:10 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. ID #183020ABT

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Mr. Burris,

Please find attached a draft of the proposed construction permit, and draft FESOP.
Note that there is a place holder for the fugitive dust plan receival date.

Thank you.

German Barria

Environmental Protection Specialist.
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

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Kras, Kim

From: Barria, German
Sent: Monday, June 27, 2022 11:07 AM
To: James Burris
Cc: Bernoteit, Bob; Michelle Bublitz
Subject: RE: Bunge North America, Inc. ID #183020ABT
Attachments: 96020027 - Bunge North America Inc - FESOP - 06-27-2022.docx

Jim,

Please find attached revised draft FESOP per the removal of the emission units that you sent on Friday.
Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Friday, June 24, 2022 9:00 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

German,

Please find attached an Addendum to the air construction permit application, application number 22040008, submitted on April 8, 2022. This addendum is being provided to remove a number of emission sources permanently from service. These changes result in no increase in emissions for the project. Please proceed with issuing the construction permit. Two hard copies of this addendum is being mailed to IEPA's permit section.

Please let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 22, 2022 11:10 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. ID #183020ABT

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Mr. Burris,

Please find attached a draft of the proposed construction permit, and draft FESOP.
Note that there is a place holder for the fugitive dust plan receival date.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;

AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;

3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;

Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than

major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator,

except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP

emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local

law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate

matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of

750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation

and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and

the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 1090.305(a), except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305.

b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.

c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:

i. Minimum cetane index of 40.

ii. Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility

property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. The Fugitive Particulate Operating Program, as submitted by the Permittee on DATE PROGRAM APPROVED BY FOS WAS RECEIVED is incorporated herein by reference. The source shall be operated under and shall

comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
Railcar Dump Pit	0.0017	27,000	0.39	1.70
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Grain Receiving Fugitives				5.40
			Total:	11.88

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #! Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05
			Total:	30.85

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Throughput (T/Mo)	(T/Yr)	EMISSIONS PM (lb/T)	(T/Mo)	(T/Yr)	PM_{10} (lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	Emissions (Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition,

Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and

malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or

USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to

demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and

(d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: (refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process

rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

25. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to

500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

26a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

27a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records

and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding

opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

28. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

29a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after

the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 32(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for

inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

33. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

34a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site

rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

i. An existing stationary CI RICE located at an area source of HAP emissions.

ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January

31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

35. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

36a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

37a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			11.88	11.88		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			30.85	30.85		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.37	65.20	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Kras, Kim

From: Barria, German
Sent: Tuesday, June 28, 2022 10:52 AM
To: James Burris
Cc: Bernoteit, Bob; Michelle Bublitz
Subject: RE: Bunge North America, Inc. ID #183020ABT
Attachments: 22040008 - Bunge North America Inc - 06-22-2022.docx

Jim,

The construction permit draft that I sent you last, is still the latest version, since the changes submitted addresses the removal of equipment, those changes only to be addressed in the operating permit.
The construction permit PM/PM10 limits is still 4.81 tons/year, however, there will be an overall source-wide decrease of - 0.29 tons/year, this is accomplished by the removal of several emission units (4.81 – 0.95 – 0.81 – 0.68 – 2.66 = -0.29 tons/year decrease.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Tuesday, June 28, 2022 10:22 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Thank you German,

We will review the draft FESOP and respond with our comments by September 1, 2022 as agreed.

Can you tell me the status of the revised draft construction permit for the project?

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 27, 2022 11:07 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Jim,

Please find attached revised draft FESOP per the removal of the emission units that you sent on Friday.
Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Friday, June 24, 2022 9:00 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

German,

Please find attached an Addendum to the air construction permit application, application number 22040008, submitted on April 8, 2022. This addendum is being provided to remove a number of emission sources permanently from service. These changes result in no increase in emissions for the project. Please proceed with issuing the construction permit. Two hard copies of this addendum is being mailed to IEPA's permit section.

Please let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 22, 2022 11:10 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. ID #183020ABT

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Mr. Burris,

Please find attached a draft of the proposed construction permit, and draft FESOP.
Note that there is a place holder for the fugitive dust plan receival date.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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Kras, Kim

From: Bernoteit, Bob
Sent: Wednesday, June 29, 2022 3:59 PM
To: Barria, German
Subject: RE: Bunge North America, Inc. ID #183020ABT

German,

Would you please identify what emission units are being removed? Also, please tie each unit being removed with the decreases shown below. Thank you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, June 28, 2022 10:52 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

Jim,

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German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Tuesday, June 28, 2022 10:22 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Thank you German,

We will review the draft FESOP and respond with our comments by September 1, 2022 as agreed.

Can you tell me the status of the revised draft construction permit for the project?

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 27, 2022 11:07 AM
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Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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From: James Burris <James.Burris@bunge.com>
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To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. ID #183020ABT

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Note that there is a place holder for the fugitive dust plan receival date.

Thank you.

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Kras, Kim

From: Barria, German
Sent: Wednesday, June 29, 2022 4:57 PM
To: James Burris
Cc: Bernoteit, Bob; Michelle Bublitz
Subject: RE: Bunge North America, Inc. ID #183020ABT

Jim,

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South APM Filter (34:35)
RHOMBO Truck Dump No. 3 Aspiration Filter (03:13)
RHOMBO Gallery General Aspiration Filter (03:18)
RHOMBO West General Aspiration Filter (09:09)
Conveying General Aspiration Filter (29:15)
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Bin 945 Germ Receiver Aspiration Filter (17:26)
North Hominy Feed Grinding General Aspiration Filter (18:07)

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Some of the conditions crossed out are conditions that will be in most construction permit.

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Illinois Environmental
Protection Agency

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Please let me know if you have any questions regarding my edits or comments.

Thank you for your assistance getting this permit issued.

Jim Burris, PE

Phone: 314-292-2937

Mobile: 314-308-3904

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Chesterfield, MO 63017

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Sent: Wednesday, June 22, 2022 11:10 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
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Kras, Kim

From: James Burris <James.Burris@bunge.com>
Sent: Thursday, June 30, 2022 8:05 AM
To: Barria, German
Cc: Bernoteit, Bob; Michelle Bublitz
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

German,

See my responses in Red below.

Thank you for your quick response.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
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Also we have to address these two units, because the air flow for the baghouse is changing, although there isn't emission increase.
South Lunchroom Screening (4880-0034-0010)
North Lunchroom Screening (4880-0034-0019)
This is not correct. There is no increase in air flow through these filters.

We will keep the requirement to submit a fugitive dust plan in the construction permit, to be submitted before or at least by the date you indicated that comments to the FESOP draft will be submitted.
A fugitive dust plan for the equipment being permit would be meaningless because none of the equipment being permitted emit fugitive dust. If you want to put a requirement to submit a fugitive dust plan for the "Entire Plant" by a certain date, say within 90 days of the permit being issued, I think that would be appropriate.

Some of the conditions crossed out are conditions that will be in most construction permit.
Understood, but please look as some of the others to see if they can be removed to help clean up the permit.

Have a great evening.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
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Illinois Environmental Protection Agency
Bureau of Air
Complaint Record

GENERAL INFORMATION			
Complaint #:	A2022-0630-002	IEPA ID #:	183020ABT
(Other) ID #:		# of Complaints Represented:	
Received by:	Deirdre McQuillen	Received from:	USEPA (Donna Howard)
Date:	06-30-2022	Time:	3:32PM

RECEIVED VIA

☐ Phone ☑ Email ☐ Mail ☐ Online Complaint Form
☐ BOL ☐ BOW ☐ OER ☐ USEPA
☐ OTHER:

COMPLAINANT INFORMATION		SUSPECT SOURCE INFORMATION	
Name:	Anonymous	Name:	Bunge North America
Address:		Contact Person:	Aric Silver
City:		Address:	321 E. North Street
State:		City:	Danville
ZIP Code:		State:	IL
Phone #:		ZIP Code:	61832
County:		County:	Vermilion
Email:		Phone #:	217-443-9784
Return Call Requested:	☐ YES ☑ NO	Email:	Aric.Silver@bunge.com

DIRECTIONS TO SOURCE

CONTACT AND FINAL DISPOSITION			
Complainant Contacted:	☐ YES ☑ NO	Date:	
USEPA Contacted:	☐ YES ☑ NO	Representative:	
Final Disposition:	☐ GIR Generated ☐ No Further Action (NFA) ☐ Tracking ☑ VN Recommended ☐ REFERRRED:		

COMPLAINT TYPE / CATEGORY

☐ Odor ☐ Open Burning ☑ Fugitive Dust ☐ Asbestos
☐ OTHER:

COMPLAINT DESCRIPTION

Complaint: No filters on grain milling exhaust systems. Grain Dust particular is unbelievable 3 blocks east of plant. A retired employee told me that is why Danville people have to wash your car's so much and you can't keep windows open on nice nights. This is also the possible reason for my wife and kids allergies. Please just check into this, I have no photos.

Investigating Inspector:	Vikash Bhakta
Date of Inspection:	07-12-2022

INVESTIGATION FINDINGS

Current Pending Permit Applications:

- Construction Permit #22040008 – CCM260 Corn Meal System Upgrade
  - Will be incorporated into FESOP #96020027 prior to issuance
- FESOP Permit #96020027 – Corn Mill & Grain Flour
  - Currently operating off Title V issued on 11-24-2003

History of Prior Violations:

- VN#: A1998-00407
- Class: 1a
- Violations/Outcome:

Citation	Comments
201.142	CONSTRUCTION WITH NO PERMIT
201.143	OPERATING WITH NO PERMIT
254.202	INACCURATE REPORTING OF EMISSIONS ON ANNUAL EMISSION REPORT
40CFR60.45(c)(3)	SO2 CONT. MONITORING SYSTEM FOR CFB BOILER DOES NOT HAVE SPAN VALUE OF 1500 PPM
40CFR60.48(e)(3)	NOX CONT. MONITORING SYSTEM FOR CFB BOILER DOES NOT HAVE SPAN VALUE OF 1000 PPM
40CFR60.49b(d)	NO CALCULATIONS FOR ANN. CAPACITY FACTOR FOR FUEL COMBUSTED IN CFB AS REQUIRED
40CFR60.49b(i)	NOT SUBMITTING ALL REQUIRED INFO IN QUARTERLY EER
40CFR62.21	EXCEEDANCE OF SO2 LIMITS

Code	Expected	Achieved
TRIGGER DATE		8/14/1998
VN SENT		10/19/1998
CCA RECEIVED	12/7/1998	12/2/1998
MEETING	12/22/1998	12/2/1998
DECISION >> CCA	1/13/1999	1/13/1999
FACILITY RESPONSE	12/23/1998	12/14/1998
RESOLVED		12/14/1998

- VN#: A1998-00363
- Class: 1a
- Violations/Outcome:

1	81060007, inco. into 72121263: PM emissions exceed maximum emis. rate
201.142	construction without permit
201.143	operating without permit
212.461(b)(2)	spoiled grain on ground
40CFR52.21	did not submit PSD permit app
9	not reporting malfunctions

Code	Expected	Achieved
TRIGGER DATE		7/16/1998
VN SENT		10/29/1998
CCA RECEIVED	12/14/1998	12/2/1998
MEETING	12/29/1998	12/2/1998
DECISION >> CCA	1/22/1999	1/13/1999
MIR DECISION	1/20/1999	1/20/1999
CDG RECOMMENDATION		1/11/2005
CDG DECISION		2/15/2005
FACILITY RESPONSE		5/19/1999
NONE		2/15/2005
RESOLVED		2/15/2005

- VN#: A1999-00331
- Class: 1a
- Violations/Outcome:

Citation	Comments
201.142	failed to obtain construction permit for truck unloading station, grain elevator, dry corn mill and specialty product reprocessings units
201.143	failed to obtain operating permit for truck unloading station, grain elevator, dry corn mill and specialty product reprocessings units

Code	Expected	Achieved
TRIGGER DATE		6/29/1999
RECEIVED		9/16/1999
VN SENT	10/16/1999	11/23/1999
CCA RECEIVED	1/8/2000	12/3/1999
MEETING		1/6/2000
DECISION >> CCA	2/26/2000	2/22/2000
CDG RECOMMENDATION		1/11/2005
CDG DECISION		9/27/1999
FACILITY RESPONSE	3/31/2000	3/31/2000
NONE		2/15/2005
RESOLVED		2/15/2005

History of Prior Complaints:

- No history of prior complaints on file.

Contact w/ Alleged Source:

- 07-12-2022 Inspection:
  - Weather:
    - Temperature: 77°F
    - Humidity: 64%
    - Wind Speed/Direction: 10-15mph; NNW
    - Condition: Fair
  - Truck probing & fugitive emission observations taken from staging area/parking lot located on N. Buchanan St. & Van Buren St.
    - Observations were taken from 10:45AM – 11:15AM
      - Witnessed the probing of three trucks
      - Observed fugitive emissions from trucks entering and leaving staging area/parking lot
  - Loading & fugitive emission observations taken from parking lot located on Van Buren St. & Lauhoff St.
    - Observations were taken from 11:30AM – 11:50AM
      - Witnessed the loading of two trucks
      - Did not observe any visible or fugitive emissions
  - General site wide fugitive dust observations were also taken
    - Did not observe any visible emissions or fugitive dust
  - Attempted to enter facility through guard shack; however, there were no guards available and phone in guard shack was no active/no dial tone.
    - Spoke w/ an employee near guard shack and explained reason for visit and if the Environmental Contact was available
    - Was informed John Clem the environmental contact was out on vacation and would not be available until the following week
    - Employee notified Aric Silver – Project Engineering Manager of the site visit and informed me he would be available in 15-20 minutes

- Mr. Silver was not made available for 40-45 minutes due to an onsite demolition project he was observing
  - Demolition performed by FE Demolition and Remediation LLC
  - Fee and NESHAP notification form was received on 04-18-2022

- Discussion w/ Mr. Silver
  - Provided Mr. Silver with reason for site visit.
  - Mr. Silver suggested source was operating under normal operating conditions and observations that were taken would be typical on any normal day when in operation.
  - Mr. Silver stated the source is not aware of any issues at the plant that was indicative of what was described in the complaint.
  - Mr. Silver also indicated water trucks are used when the source experiences issues with fugitive dust resulting from truck traffic.
    - The source does not own or operate the water truck.
    - Water trucks are rented through a local contractor.
  - The following records request w/ Mr. Silver was made:
    - Any Method 22 observations if taken (last 6 months).
    - Maintenance records for filters, specifically the most recent date for each filter replacement.
    - Fugitive Particulate Operating Program if currently operating under one (not required by permit).
  - Mr. Silver indicated the response to the records request may take over a week to submit since the environmental contact was out on vacation.

- 07-19-2022: Follow-Up
  - Submitted an email to Mr. Silver requesting a status update on the records request.
  - Mr. Silver responded and stated that facility personnel were gathering information that was requested but had several people out on vacation which was slowing the process.

- 07-27-2022: Follow-Up
  - Submitted an email to Mr. Silver requesting another status update on the records request.

- 07-28-2022: Received Response to Records Request
  - The response to the records request included a monitoring report worksheet (attached) that contained dates of last filter change including the following:
    - The operators do daily observations of our particulate-emitting sources and take corrective action if they see emissions that are not normal for our operations, however, we do not document these observations.
    - Attached is a list of all of the filters at the facility and the dates of the most recent filter material replacements. It is standard practice that we change all of the filter media during a change-out, however, we do not document this information.
    - The facility does not currently operate under a Fugitive Particulate Operating Program.

  - The following list of questions were submitted to Mr. Silver for clarification:

- You mention it is standard practice to change-out all filter media during a change-out; however, change-outs are not tracked. To make sure I understand you correctly, the dates provided in the monitoring report worksheet do not include dates for filters that may have been replaced during a change-out, is that correct?
- It may be possible that a filter was replaced more recently then the date represented in the table; however, there is no way to confirm, is that accurate?
- What triggers a change-out to occur?
- Is this separate from maintenance or inspections performed based on manufacturer's recommendations?
- How often are filters inspected onsite, does the facility have SOP's for these units associated with filter media?

- The following response was received:
  - The dates in the spreadsheet was the dates when all the filter media was changed and thus they are tracked. It would if one or two socks would need to be changed those items are not captured.
  - The operators as part of their daily travels through the department they work in, one of the items they are to observe filter discharges to observe if there is an abnormity. If there is they are to notify their supervisor and take corrective action. Corrective action can include inspecting the unit to ensure it is discharging, if the cleaning cycle is functioning correctly, and shutting down the unit to do an internal inspection to determine the cause of the abnormity.
  - Filter media changes are done by increases in the pressure differential across the media, from the visual inspection, and age of the media. The operation group must look at when there will be ample time to take the unit down to perform the work. The plant has units with 9 filter sock up to a unit with over 500, so there is some difference between each of the units. We do preform preventive maintenance on the units, based on manufacture's recommendation and years of experience of operating the different models. We do have SOP's for changing media.

- <u>08-04-2022: Additional Records Requested</u>
  - The last three years of periodic inspections and prompt repairs of defects as it relates to filter change outs along with preventative maintenance recommended by manufacturer, and SOP's that are followed for changing filter media were requested via email.

- <u>08-31-2022: Status Update on Records Request</u>
  - As of August 31, 2022, the source has yet to provide a response to the records request.

<u>RECOMMEDATION BASED ON AVAILABLE INFORMATION:</u>

The source caused, threatened, or allowed the discharge of PM from its staging area and roadways into the atmosphere [35 IAC 201.141]. The source also caused and allowed the emission of fugitive PM from its staging area and roadways, which was visible by the observer looking toward the zenith at a point beyond the property line of the source [35 IAC 212.301]. Fugitive emissions observed from truck traffic was discussed with the permit section. Draft TitleV-FESOP was reviewed and recommended increasing frequency of opacity observations from every 5 years to every quarter.

Based on information provided by the source contact, operators perform daily observations of particulate emitting sources and take corrective action if they see emissions that are not normal for operations; however, do not document these observations. In addition, the source contact stated it is standard practice that they change all filter media during a change-out; however, do not document the information. Review of the monitoring report worksheet that was provided noted 64 areas with the last filter change date to be *prior to July 2017*. Due to concerns with the frequency in which filter media is replaced/changed, an additional records request (attached) was made on 08-04-2022. Records addressing use of good operating practices for control equipment which include records for periodic inspection and records for prompt repair of defects for the last 3 years was requested.

Records of every periodic inspection and prompt repair of defects are required to be maintained and based on the initial response, does not appear to be the case. Periodic inspections and prompt repairs of defects were requested as it relates to filter change outs, preventative maintenance recommended by manufacturer, and SOP's that should be followed when replacing or changing filter media.

As of August 31, 2022, a response to records requested on August 4, 2022, has yet to be received. Recommend VN.

SIGNATURE	
RECORD CERTIFICATION:	X Inspector

Kras, Kim

From: Barria, German
Sent: Friday, July 1, 2022 2:08 PM
To: Marr, Bill
Cc: Bernoteit, Bob
Subject: FW: Bunge North America, Inc. ID #183020ABT

fyi

German Barria
Environmental Protection Specialist.
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 1:49 PM
To: Barria, German <German.Barria@Illinois.gov>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Good afternoon German and Bob, I understand that you had a meeting with Jim today regarding the minor modification construction permit application for our Danville facility. I apologize that I was not able to be on that call as I had a previous commitment, but I was able to connect with Jim and he briefed me on the discussion.

For background:
Bunge submitted a construction permit application for a minor modification that would have a potential to emit of roughly 3 tons per year of particulate. Illinois EPA notified Bunge that a construction permit that showed any increase in emissions would not be issued without a corresponding decrease in permitted emissions because the facility is located in an Environmental Justice area. Although there is nothing in the Illinois regulations that require this corresponding decrease in permitted emissions, in an effort to secure the construction permit necessary for Bunge to grow its business in Danville, Bunge submitted a list of emission units where, if removed, would show a decrease in emission rates for the project to offset the increase proposed by the new project.

Additionally, Bunge committed to reviewing the draft FESOP and drafting the fugitive dust plan by September 1, 2022. Based on the correspondence below, Bunge understood that was acceptable and that IEPA would proceed with finalizing and issuing the construction permit.

After the call today, we understand that IEPA is insistent that the construction permit can't be issued without issuing the FESOP. I understand that there was a series of questions asked to try to understand the rationale behind this position and also explore other options in an effort to move the construction permit forward, but I also understand that in the end that this was IEPA's position and that position was not going to change on the phone call.

Bunge requests your assistance to help us understand why the construction permit can't be issued without the FESOP and to help us determine if there are other options for addressing EJ concerns and issuing the construction permit for

the minor modification. As noted above, Bunge has committed to turning around the FESOP and the fugitive dust plan by September 1, but does need the time to draft the fugitive dust plan.

We would like to meet with you and your supervisor next week to discuss the above items. Please propose a couple of dates and times that you and your supervisor are available to discuss.

Sincerely
Michelle

Michelle Bublitz
Environmental Director

Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 29, 2022 4:57 PM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Jim,

About those emission units we need to know when they were decommission, or a date that they will be decommission.
South APM Filter (34:35)
RHOMBO Truck Dump No. 3 Aspiration Filter (03:13)
RHOMBO Gallery General Aspiration Filter (03:18)
RHOMBO West General Aspiration Filter (09:09)
Conveying General Aspiration Filter (29:15)
Round Bin General Aspiration Filter (29:27)
Bin 945 Germ Receiver Aspiration Filter (17:26)
North Hominy Feed Grinding General Aspiration Filter (18:07)

Also we have to address these two units, because the air flow for the baghouse is changing, although there isn't emission increase.
South Lunchroom Screening (4880-0034-0010)
North Lunchroom Screening (4880-0034-0019)

We will keep the requirement to submit a fugitive dust plan in the construction permit, to be submitted before or at least by the date you indicated that comments to the FESOP draft will be submitted.

Some of the conditions crossed out are conditions that will be in most construction permit.

Have a great evening.

German Barria
Environmental Protection Specialist.
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Wednesday, June 29, 2022 1:33 PM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

German,

I have attached a redlined copy of the draft Construction permit. I have added comments to the draft where I thought additional clarification to my edits were necessary. Some of my edits were to help streamline the permit and eliminate unnecessary or redundant language. I also wanted to clarify that the permit application Bunge submitted was for the addition of number of totally enclosed emission units aspirated to a new baghouse control device, the S 105 Roof Carter Day filter. The draft permit referenced North and South Lunchroom Screening for some reason. North and South Lunchroom Screening are not part of the project for which the application was submitted and references to North and South Lunchroom Screening have been removed from the draft permit. Furthermore, no emission unit associated with this project emits fugitive particulate emissions, all emissions pass through a stack, therefore, my redlined copy of the draft permit removed conditions associated with the emission of fugitive particulate emissions.

Please let me know if you have any questions regarding my edits or comments.

Thank you for your assistance getting this permit issued.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, June 28, 2022 10:52 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Jim,

The construction permit draft that I sent you last, is still the latest version, since the changes submitted addresses the removal of equipment, those changes only to be addressed in the operating permit.
The construction permit PM/PM10 limits is still 4.81 tons/year, however, there will be an overall source-wide decrease of - 0.29 tons/year, this is accomplished by the removal of several emission units (4.81 – 0.95 – 0.81 – 0.68 – 2.66 = - 0.29 tons/year decrease.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Tuesday, June 28, 2022 10:22 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Thank you German,

We will review the draft FESOP and respond with our comments by September 1, 2022 as agreed.

Can you tell me the status of the revised draft construction permit for the project?

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 27, 2022 11:07 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Jim,

Please find attached revised draft FESOP per the removal of the emission units that you sent on Friday.
Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Friday, June 24, 2022 9:00 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

German,

Please find attached an Addendum to the air construction permit application, application number 22040008, submitted on April 8, 2022. This addendum is being provided to remove a number of emission sources permanently from service. These changes result in no increase in emissions for the project. Please proceed with issuing the construction permit. Two hard copies of this addendum is being mailed to IEPA's permit section.

Please let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 22, 2022 11:10 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. ID #183020ABT

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Mr. Burris,

Please find attached a draft of the proposed construction permit, and draft FESOP.
Note that there is a place holder for the fugitive dust plan receival date.

Thank you.

German Barria

Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

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No confidentiality or privilege is waived or lost by any misdirected transmission.
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Kras, Kim

From: Bernoteit, Bob
Sent: Friday, July 1, 2022 2:18 PM
To: Michelle Bublitz; Barria, German
Cc: James Burris; Marr, Bill
Subject: RE: Bunge North America, Inc. ID #183020ABT

Michelle,

We are available on Tuesday morning or on Wednesday.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 1:49 PM
To: Barria, German <German.Barria@Illinois.gov>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

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Sincerely
Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 Mobile: 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

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Subject: RE: Bunge North America, Inc. ID #183020ABT

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North Lunchroom Screening (4880-0034-0019)

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Some of the conditions crossed out are conditions that will be in most construction permit.

Have a great evening.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: James Burris <James.Burris@bunge.com>
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Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

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Thank you for your assistance getting this permit issued.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, June 28, 2022 10:52 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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The construction permit PM/PM10 limits is still 4.81 tons/year, however, there will be an overall source-wide decrease of - 0.29 tons/year, this is accomplished by the removal of several emission units (4.81 – 0.95 – 0.81 – 0.68 – 2.66 = - 0.29 tons/year decrease.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Tuesday, June 28, 2022 10:22 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Thank you German,

We will review the draft FESOP and respond with our comments by September 1, 2022 as agreed.

Can you tell me the status of the revised draft construction permit for the project?

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 27, 2022 11:07 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Jim,

Please find attached revised draft FESOP per the removal of the emission units that you sent on Friday.
Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Friday, June 24, 2022 9:00 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

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Please find attached an Addendum to the air construction permit application, application number 22040008, submitted on April 8, 2022. This addendum is being provided to remove a number of emission sources permanently from service. These changes result in no increase in emissions for the project. Please proceed with issuing the construction permit. Two hard copies of this addendum is being mailed to IEPA's permit section.

Please let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 22, 2022 11:10 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. ID #183020ABT

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Mr. Burris,

Please find attached a draft of the proposed construction permit, and draft FESOP.
Note that there is a place holder for the fugitive dust plan receival date.

Thank you.

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Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

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Kras, Kim

From: Bernoteit, Bob
Sent: Friday, July 1, 2022 2:40 PM
To: Michelle Bublitz
Subject: Accepted: Bunge North America, Inc. ID #183020ABT

Kras, Kim

From: Marr, Bill
Sent: Tuesday, July 5, 2022 6:43 AM
To: Michelle Bublitz
Cc: Bernoteit, Bob; Barria, German; James Burris
Subject: RE: Bunge North America, Inc. ID #183020ABT

I have an appointment this morning at 8:20. Can we reschedule for today after 10 or any time Wednesday? Thanks

-----Original Appointment-----
From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 2:39 PM
To: Bernoteit, Bob; Barria, German; James Burris; Marr, Bill
Subject: [External] Bunge North America, Inc. ID #183020ABT
When: Tuesday, July 5, 2022 8:30 AM-9:30 AM (UTC-06:00) Central Time (US & Canada).
Where: Microsoft Teams Meeting

Thank you for your quick response. If this time doesn't work, please let me know.

Michelle

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or join by entering a meeting ID
Meeting ID: 371 650 274 488
Passcode: ZkFNmE

Join with a video conferencing device
598238712@t.plcm.vc
Video Conference ID: 121 154 040 4
Alternate VTC instructions

Learn More | Meeting options

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Friday, July 1, 2022 2:18 PM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>; Barria, German <German.Barria@Illinois.gov>

Cc: James Burris <James.Burris@bunge.com>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Michelle,

We are available on Tuesday morning or on Wednesday.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 1:49 PM
To: Barria, German <German.Barria@Illinois.gov>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Good afternoon German and Bob, I understand that you had a meeting with Jim today regarding the minor modification construction permit application for our Danville facility. I apologize that I was not able to be on that call as I had a previous commitment, but I was able to connect with Jim and he briefed me on the discussion.

For background:
Bunge submitted a construction permit application for a minor modification that would have a potential to emit of roughly 3 tons per year of particulate. Illinois EPA notified Bunge that a construction permit that showed any increase in emissions would not be issued without a corresponding decrease in permitted emissions because the facility is located in an Environmental Justice area. Although there is nothing in the Illinois regulations that require this corresponding decrease in permitted emissions, in an effort to secure the construction permit necessary for Bunge to grow its business in Danville, Bunge submitted a list of emission units where, if removed, would show a decrease in emission rates for the project to offset the increase proposed by the new project.

Additionally, Bunge committed to reviewing the draft FESOP and drafting the fugitive dust plan by September 1, 2022. Based on the correspondence below, Bunge understood that was acceptable and that IEPA would proceed with finalizing and issuing the construction permit.

After the call today, we understand that IEPA is insistent that the construction permit can't be issued without issuing the FESOP. I understand that there was a series of questions asked to try to understand the rationale behind this position and also explore other options in an effort to move the construction permit forward, but I also understand that in the end that this was IEPA's position and that position was not going to change on the phone call.

Bunge requests your assistance to help us understand why the construction permit can't be issued without the FESOP and to help us determine if there are other options for addressing EJ concerns and issuing the construction permit for the minor modification. As noted above, Bunge has committed to turning around the FESOP and the fugitive dust plan by September 1, but does need the time to draft the fugitive dust plan.

We would like to meet with you and your supervisor next week to discuss the above items. Please propose a couple of dates and times that you and your supervisor are available to discuss.

Sincerely

Michelle

Michelle Bublitz
Environmental Director

Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 29, 2022 4:57 PM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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South APM Filter (34:35)
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North Hominy Feed Grinding General Aspiration Filter (18:07)

Also we have to address these two units, because the air flow for the baghouse is changing, although there isn't emission increase.
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We will keep the requirement to submit a fugitive dust plan in the construction permit, to be submitted before or at least by the date you indicated that comments to the FESOP draft will be submitted.

Some of the conditions crossed out are conditions that will be in most construction permit.

Have a great evening.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit

Phone: 217-785-0767

Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Wednesday, June 29, 2022 1:33 PM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
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Please let me know if you have any questions regarding my edits or comments.

Thank you for your assistance getting this permit issued.

Jim Burris, PE

Phone: 314-292-2937

Mobile: 314-308-3904

1391 Timberlake Manor Parkway
Chesterfield, MO 63017

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1391 Timberlake Manor Parkway
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Subject: Bunge North America, Inc. ID #183020ABT

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German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

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Kras, Kim

From: Marr, Bill
Sent: Tuesday, July 5, 2022 10:57 AM
To: Michelle Bublitz; Bernoteit, Bob; Barria, German; James Burris
Subject: RE: Bunge North America, Inc. ID #183020ABT

Is there a phone number to call into?

-----Original Appointment-----
From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 2:39 PM
To: Michelle Bublitz; Bernoteit, Bob; Barria, German; James Burris; Marr, Bill
Subject: Bunge North America, Inc. ID #183020ABT
When: Tuesday, July 5, 2022 11:00 AM-12:00 PM (UTC-06:00) Central Time (US & Canada).
Where: Microsoft Teams Meeting

Thank you for your quick response. If this time doesn't work, please let me know.

Michelle

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or join by entering a meeting ID
Meeting ID: 371 650 274 488
Passcode: ZkFNmE

Join with a video conferencing device
598238712@t.plcm.vc
Video Conference ID: 121 154 040 4
Alternate VTC instructions

Learn More | Meeting options

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Friday, July 1, 2022 2:18 PM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>; Barria, German <German.Barria@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Michelle,

We are available on Tuesday morning or on Wednesday.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 1:49 PM
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Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

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We would like to meet with you and your supervisor next week to discuss the above items. Please propose a couple of dates and times that you and your supervisor are available to discuss.

Sincerely
Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 Mobile: 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

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Sent: Wednesday, June 29, 2022 4:57 PM
To: James Burris <James.Burris@bunge.com>
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Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 27, 2022 11:07 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Jim,

Please find attached revised draft FESOP per the removal of the emission units that you sent on Friday.
Thank you.

German Barria
Environmental Protection Specialist.
IEPA, Bureau of Air, Permit Section. FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Friday, June 24, 2022 9:00 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

German,

Please find attached an Addendum to the air construction permit application, application number 22040008, submitted on April 8, 2022. This addendum is being provided to remove a number of emission sources permanently from service. These changes result in no increase in emissions for the project. Please proceed with issuing the construction permit. Two hard copies of this addendum is being mailed to IEPA's permit section.

Please let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 22, 2022 11:10 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. ID #183020ABT

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Mr. Burris,

Please find attached a draft of the proposed construction permit, and draft FESOP.
Note that there is a place holder for the fugitive dust plan receival date.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

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Kras, Kim

From: Marr, Bill
Sent: Tuesday, July 5, 2022 11:00 AM
To: Michelle Bublitz; Bernoteit, Bob; Barria, German; James Burris
Subject: RE: Bunge North America, Inc. ID #183020ABT

Yes, but my computer does not have a microphone, so you will not be able to hear me

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Tuesday, July 5, 2022 10:58 AM
To: Marr, Bill <Bill.Marr@illinois.gov>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>; James Burris <James.Burris@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Hi Bill, can you connect via your computer by clicking on the link in the invite?

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385
BUNGE

From: Marr, Bill <Bill.Marr@illinois.gov>
Sent: Tuesday, July 5, 2022 10:57 AM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>; James Burris <James.Burris@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Is there a phone number to call into?

-----Original Appointment-----
From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 2:39 PM
To: Michelle Bublitz; Bernoteit, Bob; Barria, German; James Burris; Marr, Bill
Subject: Bunge North America, Inc. ID #183020ABT
When: Tuesday, July 5, 2022 11:00 AM-12:00 PM (UTC-06:00) Central Time (US & Canada).
Where: Microsoft Teams Meeting

Thank you for your quick response. If this time doesn't work, please let me know.

Michelle

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or join by entering a meeting ID
Meeting ID: 371 650 274 488
Passcode: ZkFNmE

Join with a video conferencing device
598238712@t.plcm.vc
Video Conference ID: 121 154 040 4
Alternate VTC instructions

Learn More | Meeting options

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Friday, July 1, 2022 2:18 PM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>; Barria, German <German.Barria@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Michelle,

We are available on Tuesday morning or on Wednesday.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 1:49 PM
To: Barria, German <German.Barria@Illinois.gov>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Good afternoon German and Bob, I understand that you had a meeting with Jim today regarding the minor modification construction permit application for our Danville facility. I apologize that I was not able to be on that call as I had a previous commitment, but I was able to connect with Jim and he briefed me on the discussion.

For background:
Bunge submitted a construction permit application for a minor modification that would have a potential to emit of roughly 3 tons per year of particulate. Illinois EPA notified Bunge that a construction permit that showed any increase in emissions would not be issued without a corresponding decrease in permitted emissions because the facility is located in an Environmental Justice area. Although there is nothing in the Illinois regulations that require this corresponding decrease in permitted emissions, in an effort to secure the construction permit necessary for Bunge to grow its business in Danville, Bunge submitted a list of emission units where, if removed, would show a decrease in emission rates for the project to offset the increase proposed by the new project.

Additionally, Bunge committed to reviewing the draft FESOP and drafting the fugitive dust plan by September 1, 2022. Based on the correspondence below, Bunge understood that was acceptable and that IEPA would proceed with finalizing and issuing the construction permit.

After the call today, we understand that IEPA is insistent that the construction permit can't be issued without issuing the FESOP. I understand that there was a series of questions asked to try to understand the rationale behind this position and also explore other options in an effort to move the construction permit forward, but I also understand that in the end that this was IEPA's position and that position was not going to change on the phone call.

Bunge requests your assistance to help us understand why the construction permit can't be issued without the FESOP and to help us determine if there are other options for addressing EJ concerns and issuing the construction permit for the minor modification. As noted above, Bunge has committed to turning around the FESOP and the fugitive dust plan by September 1, but does need the time to draft the fugitive dust plan.

We would like to meet with you and your supervisor next week to discuss the above items. Please propose a couple of dates and times that you and your supervisor are available to discuss.

Sincerely
Michelle

Michelle Bublitz
Environmental Director

Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 29, 2022 4:57 PM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Jim,

About those emission units we need to know when they were decommission, or a date that they will be decommission.
South APM Filter (34:35)
RHOMBO Truck Dump No. 3 Aspiration Filter (03:13)
RHOMBO Gallery General Aspiration Filter (03:18)
RHOMBO West General Aspiration Filter (09:09)
Conveying General Aspiration Filter (29:15)
Round Bin General Aspiration Filter (29:27)
Bin 945 Germ Receiver Aspiration Filter (17:26)
North Hominy Feed Grinding General Aspiration Filter (18:07)

Also we have to address these two units, because the air flow for the baghouse is changing, although there isn't emission increase.
South Lunchroom Screening (4880-0034-0010)
North Lunchroom Screening (4880-0034-0019)

We will keep the requirement to submit a fugitive dust plan in the construction permit, to be submitted before or at least by the date you indicated that comments to the FESOP draft will be submitted.

Some of the conditions crossed out are conditions that will be in most construction permit.

Have a great evening.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Wednesday, June 29, 2022 1:33 PM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

German,

I have attached a redlined copy of the draft Construction permit. I have added comments to the draft where I thought additional clarification to my edits were necessary. Some of my edits were to help streamline the permit and eliminate unnecessary or redundant language. I also wanted to clarify that the permit application Bunge submitted was for the addition of number of totally enclosed emission units aspirated to a new baghouse control device, the S 105 Roof Carter Day filter. The draft permit referenced North and South Lunchroom Screening for some reason. North and South Lunchroom Screening are not part of the project for which the application was submitted and references to North and South Lunchroom Screening have been removed from the draft permit. Furthermore, no emission unit associated with

this project emits fugitive particulate emissions, all emissions pass through a stack, therefore, my redlined copy of the draft permit removed conditions associated with the emission of fugitive particulate emissions.

Please let me know if you have any questions regarding my edits or comments.

Thank you for your assistance getting this permit issued.

Jim Burris, PE

Phone: 314-292-2937

Mobile: 314-308-3904

1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, June 28, 2022 10:52 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Jim,

The construction permit draft that I sent you last, is still the latest version, since the changes submitted addresses the removal of equipment, those changes only to be addressed in the operating permit.
The construction permit PM/PM10 limits is still 4.81 tons/year, however, there will be an overall source-wide decrease of - 0.29 tons/year, this is accomplished by the removal of several emission units (4.81 – 0.95 – 0.81 – 0.68 – 2.66 = -0.29 tons/year decrease.

German Barria

Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Tuesday, June 28, 2022 10:22 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Thank you German,

We will review the draft FESOP and respond with our comments by September 1, 2022 as agreed.

Can you tell me the status of the revised draft construction permit for the project?

Jim Burris, PE

Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, June 27, 2022 11:07 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

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To: Barria, German <German.Barria@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
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German,

Please find attached an Addendum to the air construction permit application, application number 22040008, submitted on April 8, 2022. This addendum is being provided to remove a number of emission sources permanently from service. These changes result in no increase in emissions for the project. Please proceed with issuing the construction permit. Two hard copies of this addendum is being mailed to IEPA's permit section.

Please let me know if you have any questions.

Jim Burris, PE

Phone: 314-292-2937

Mobile: 314-308-3904

1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 22, 2022 11:10 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
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Mr. Burris,

Please find attached a draft of the proposed construction permit, and draft FESOP.
Note that there is a place holder for the fugitive dust plan receival date.

Thank you.

German Barria

Environmental Protection Specialist.
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

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Kras, Kim

Subject:	Bungue
Location:	webex
Start:	Tue 7/5/2022 11:00 AM
End:	Tue 7/5/2022 11:30 AM
Show Time As:	Tentative
Recurrence:	(none)
Meeting Status:	Not yet responded
Organizer:	Barria, German
Required Attendees:	Bernoteit, Bob; Marr, Bill; James Burris; Michelle Bublitz

-- Do not delete or change any of the following text. --

When it's time, join your Webex meeting here.

Join meeting

More ways to join:

Join from the meeting link
https://illinois.webex.com/illinois/j.php?MTID=m2fb707fa70534b9ef8f8d31cf9f76d9f

Join by meeting number
Meeting number (access code): 2461 221 3501
Meeting password: GWspBfcA288

Tap to join from a mobile device (attendees only)
+1-312-535-8110,,24612213501## United States Toll (Chicago)
+1-415-655-0002,,24612213501## US Toll

Join by phone
+1-312-535-8110 United States Toll (Chicago)
+1-415-655-0002 US Toll
Global call-in numbers

Join from a video system or application
Dial 24612213501@illinois.webex.com
You can also dial 173.243.2.68 and enter your meeting number.

Join using Microsoft Lync or Microsoft Skype for Business

Dial 24612213501.illinois@lync.webex.com

If you are a host, click here to view host information.

Need help? Go to https://help.webex.com

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Kras, Kim

From: Bernoteit, Bob
Sent: Tuesday, July 5, 2022 11:01 AM
To: Marr, Bill; Michelle Bublitz; Barria, German; James Burris
Subject: RE: Bunge North America, Inc. ID #183020ABT

I don't have a microphone for my computer as well.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Marr, Bill <Bill.Marr@illinois.gov>
Sent: Tuesday, July 5, 2022 11:00 AM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>; James Burris <James.Burris@bunge.com>
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Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Hi Bill, can you connect via your computer by clicking on the link in the invite?

Michelle Bublitz
Environmental Director

Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
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Subject: RE: Bunge North America, Inc. ID #183020ABT

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Is there a phone number to call into?

-----Original Appointment-----
From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 2:39 PM
To: Michelle Bublitz; Bernoteit, Bob; Barria, German; James Burris; Marr, Bill
Subject: Bunge North America, Inc. ID #183020ABT
When: Tuesday, July 5, 2022 11:00 AM-12:00 PM (UTC-06:00) Central Time (US & Canada).
Where: Microsoft Teams Meeting

Thank you for your quick response. If this time doesn't work, please let me know.

Michelle

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or join by entering a meeting ID
Meeting ID: 371 650 274 488
Passcode: ZkFNmE

Join with a video conferencing device
598238712@t.plcm.vc
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Alternate VTC instructions

Learn More | Meeting options

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Cc: James Burris <James.Burris@bunge.com>; Marr, Bill <Bill.Marr@illinois.gov>
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Michelle,

We are available on Tuesday morning or on Wednesday.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

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Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

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We would like to meet with you and your supervisor next week to discuss the above items. Please propose a couple of dates and times that you and your supervisor are available to discuss.

Sincerely
Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 29, 2022 4:57 PM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Jim,

About those emission units we need to know when they were decommission, or a date that they will be decommission.
South APM Filter (34:35)
RHOMBO Truck Dump No. 3 Aspiration Filter (03:13)
RHOMBO Gallery General Aspiration Filter (03:18)
RHOMBO West General Aspiration Filter (09:09)
Conveying General Aspiration Filter (29:15)
Round Bin General Aspiration Filter (29:27)
Bin 945 Germ Receiver Aspiration Filter (17:26)
North Hominy Feed Grinding General Aspiration Filter (18:07)

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South Lunchroom Screening (4880-0034-0010)
North Lunchroom Screening (4880-0034-0019)

We will keep the requirement to submit a fugitive dust plan in the construction permit, to be submitted before or at least by the date you indicated that comments to the FESOP draft will be submitted.

Some of the conditions crossed out are conditions that will be in most construction permit.

Have a great evening.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Wednesday, June 29, 2022 1:33 PM
To: Barria, German <German.Barria@Illinois.gov>

Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

German,

I have attached a redlined copy of the draft Construction permit. I have added comments to the draft where I thought additional clarification to my edits were necessary. Some of my edits were to help streamline the permit and eliminate unnecessary or redundant language. I also wanted to clarify that the permit application Bunge submitted was for the addition of number of totally enclosed emission units aspirated to a new baghouse control device, the S 105 Roof Carter Day filter. The draft permit referenced North and South Lunchroom Screening for some reason. North and South Lunchroom Screening are not part of the project for which the application was submitted and references to North and South Lunchroom Screening have been removed from the draft permit. Furthermore, no emission unit associated with this project emits fugitive particulate emissions, all emissions pass through a stack, therefore, my redlined copy of the draft permit removed conditions associated with the emission of fugitive particulate emissions.

Please let me know if you have any questions regarding my edits or comments.

Thank you for your assistance getting this permit issued.

Jim Burris, PE

Phone: 314-292-2937

Mobile: 314-308-3904

1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, June 28, 2022 10:52 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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German Barria

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IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit

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Illinois Environmental
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Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Thank you German,

We will review the draft FESOP and respond with our comments by September 1, 2022 as agreed.

Can you tell me the status of the revised draft construction permit for the project?

Jim Burris, PE

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Subject: RE: Bunge North America, Inc. ID #183020ABT

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Jim,

Please find attached revised draft FESOP per the removal of the emission units that you sent on Friday.
Thank you.

German Barria

Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

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To: Barria, German <German.Barria@Illinois.gov>
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Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

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Please let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, June 22, 2022 11:10 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. ID #183020ABT

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Mr. Burris,

Please find attached a draft of the proposed construction permit, and draft FESOP.
Note that there is a place holder for the fugitive dust plan receival date.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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If you are not the intended recipient, you must not use, disclose, distribute or copy any part of this message.

Kras, Kim

From: Marr, Bill
Sent: Tuesday, July 5, 2022 11:02 AM
To: Bernoteit, Bob; Michelle Bublitz; Barria, German; James Burris
Subject: RE: Bunge North America, Inc. ID #183020ABT

We can hear you, but you can't hear us

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Tuesday, July 5, 2022 11:01 AM
To: Marr, Bill <Bill.Marr@illinois.gov>; Michelle Bublitz <Michelle.Bublitz@bunge.com>; Barria, German <German.Barria@Illinois.gov>; James Burris <James.Burris@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

I don't have a microphone for my computer as well.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Marr, Bill <Bill.Marr@illinois.gov>
Sent: Tuesday, July 5, 2022 11:00 AM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>; James Burris <James.Burris@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

Yes, but my computer does not have a microphone, so you will not be able to hear me

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Tuesday, July 5, 2022 10:58 AM
To: Marr, Bill <Bill.Marr@illinois.gov>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>; James Burris <James.Burris@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Hi Bill, can you connect via your computer by clicking on the link in the invite?

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Marr, Bill <Bill.Marr@illinois.gov>
Sent: Tuesday, July 5, 2022 10:57 AM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>; James Burris <James.Burris@bunge.com>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Is there a phone number to call into?

-----Original Appointment-----
From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 2:39 PM
To: Michelle Bublitz; Bernoteit, Bob; Barria, German; James Burris; Marr, Bill
Subject: Bunge North America, Inc. ID #183020ABT
When: Tuesday, July 5, 2022 11:00 AM-12:00 PM (UTC-06:00) Central Time (US & Canada).
Where: Microsoft Teams Meeting

Thank you for your quick response. If this time doesn't work, please let me know.

Michelle

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or join by entering a meeting ID
Meeting ID: 371 650 274 488
Passcode: ZkFNmE

Join with a video conferencing device
598238712@t.plcm.vc
Video Conference ID: 121 154 040 4
Alternate VTC instructions

Learn More | Meeting options

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Friday, July 1, 2022 2:18 PM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>; Barria, German <German.Barria@Illinois.gov>

Cc: James Burris <James.Burris@bunge.com>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: RE: Bunge North America, Inc. ID #183020ABT

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Michelle,

We are available on Tuesday morning or on Wednesday.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 1, 2022 1:49 PM
To: Barria, German <German.Barria@Illinois.gov>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Bunge North America, Inc. ID #183020ABT

Good afternoon German and Bob, I understand that you had a meeting with Jim today regarding the minor modification construction permit application for our Danville facility. I apologize that I was not able to be on that call as I had a previous commitment, but I was able to connect with Jim and he briefed me on the discussion.

For background:
Bunge submitted a construction permit application for a minor modification that would have a potential to emit of roughly 3 tons per year of particulate. Illinois EPA notified Bunge that a construction permit that showed any increase in emissions would not be issued without a corresponding decrease in permitted emissions because the facility is located in an Environmental Justice area. Although there is nothing in the Illinois regulations that require this corresponding decrease in permitted emissions, in an effort to secure the construction permit necessary for Bunge to grow its business in Danville, Bunge submitted a list of emission units where, if removed, would show a decrease in emission rates for the project to offset the increase proposed by the new project.

Additionally, Bunge committed to reviewing the draft FESOP and drafting the fugitive dust plan by September 1, 2022. Based on the correspondence below, Bunge understood that was acceptable and that IEPA would proceed with finalizing and issuing the construction permit.

After the call today, we understand that IEPA is insistent that the construction permit can't be issued without issuing the FESOP. I understand that there was a series of questions asked to try to understand the rationale behind this position and also explore other options in an effort to move the construction permit forward, but I also understand that in the end that this was IEPA's position and that position was not going to change on the phone call.

Bunge requests your assistance to help us understand why the construction permit can't be issued without the FESOP and to help us determine if there are other options for addressing EJ concerns and issuing the construction permit for the minor modification. As noted above, Bunge has committed to turning around the FESOP and the fugitive dust plan by September 1, but does need the time to draft the fugitive dust plan.

We would like to meet with you and your supervisor next week to discuss the above items. Please propose a couple of dates and times that you and your supervisor are available to discuss.

Sincerely

Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 Mobile: 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

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North Lunchroom Screening (4880-0034-0019)

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Have a great evening.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit

Phone: 217-785-0767

Illinois Environmental
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Thank you German,

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Mobile: 314-308-3904
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Chesterfield, MO 63017
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Mobile: 314-308-3904
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Chesterfield, MO 63017

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Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America, Inc. ID #183020ABT

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Note that there is a place holder for the fugitive dust plan receival date.

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Illinois Environmental Protection Agency

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Kras, Kim

From:	Barria, German
Sent:	Tuesday, July 5, 2022 11:49 AM
To:	James Burris
Cc:	Bernoteit, Bob
Subject:	fugitive dust plan
Attachments:	Fugitive Dust Handbook 2006.pdf; Fugitive_Dust Plan_Draft FPOP.docx; FUGITIVEFORM.pdf; FUGITIVEPARTICULATE.doc; Inspection Manual For PM 10 Emissions From Paved Unpaved Roads And Storage Piles.pdf

Jim,
Here is some of the documents/ guidance we were talking about.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

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Kras, Kim

From:	Barria, German
Sent:	Tuesday, July 5, 2022 12:02 PM
To:	James Burris
Cc:	Bernoteit, Bob
Subject:	updated drafts permits
Attachments:	96020027 - Bunge North America Inc - FESOP - 07-05-2022.docx; 22040008 - Construction Permit Bunge North America Inc - 07-05-2022.docx

Jim,

The draft construction permit draft was updated to remove the fugitive dust plan.
The draft FESOP was revised to put the 90 days requirement for the fugitive dust plan.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;

AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;

3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;

Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than

major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator,

except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP

emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local

law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate

matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of

750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and

the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63— Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 1090.305(a), except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305.

b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.

c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:

i. Minimum cetane index of 40.

ii. Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility

property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

   vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated

under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
Railcar Dump Pit	0.0017	27,000	0.39	1.70
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Grain Receiving Fugitives				5.40
			Total:	11.88

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05
			Total:	30.85

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

	Throughput			EMISSIONS PM			PM_{10}	
Emission Unit	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition,

Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and

malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

   i. Sampling ports adequate for test methods applicable to such facility. This includes:

      A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

      B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

   ii. Safe sampling platform(s).

   iii. Safe access to sampling platform(s).

   iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or

USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to

demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and

(d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process

rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

25. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to

500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

26a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

27a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records

and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding

opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

28. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

29a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after

the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 32(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for

inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

33. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

34a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site

rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

i. An existing stationary CI RICE located at an area source of HAP emissions.

ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January

31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31,

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

35. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

36a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

37a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			11.88	11.88		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			30.85	30.85		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.37	65.20	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Kras, Kim

From: Bernoteit, Bob
Sent: Tuesday, July 5, 2022 1:31 PM
To: Marr, Bill
Subject: FW: updated drafts permits
Attachments: 96020027 - Bunge North America Inc - FESOP - 07-05-2022.docx; 22040008 - Construction Permit Bunge North America Inc - 07-05-2022.docx

From the draft FESOP:

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, July 5, 2022 12:02 PM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: updated drafts permits

Jim,

The draft construction permit draft was updated to remove the fugitive dust plan.
The draft FESOP was revised to put the 90 days requirement for the fugitive dust plan.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;

AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;

3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;

Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than

major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator,

except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP

emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local

law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate

matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of

750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation

and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and

the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 1090.305(a), except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305.

b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.

c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:

i. Minimum cetane index of 40.

ii. Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility

property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

   vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated

under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
Railcar Dump Pit	0.0017	27,000	0.39	1.70
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Grain Receiving Fugitives				5.40
			Total:	11.88

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05
			Total:	30.85

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Throughput (T/Mo)	(T/Yr)	EMISSIONS PM (lb/T)	(T/Mo)	(T/Yr)	PM_{10} (lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition,

Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and

malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

   i. Sampling ports adequate for test methods applicable to such facility. This includes:

      A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

      B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

   ii. Safe sampling platform(s).

   iii. Safe access to sampling platform(s).

   iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or

USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to

demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and

(d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process

rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

25. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to

500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

26a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

27a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records

and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding

opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

28. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

29a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after

the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 32(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for

inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

33. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

34a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site

rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

i. An existing stationary CI RICE located at an area source of HAP emissions.

ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January

31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

35. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

36a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

37a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			11.88	11.88		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			30.85	30.85		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.37	65.20	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)-(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i)(C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Kras, Kim

From: Bernoteit, Bob
Sent: Tuesday, July 5, 2022 3:13 PM
To: Marr, Bill
Cc: Barria, German
Subject: FW: Bunge North America, Inc. (I.D. No.: 183020ABT) - EJ Clearance request
Attachments: EJ Indicators Bunge North America Inc.xlsx; EJ Clearance Memo 22040008 - Bunge North America, Inc..docx

Bill,

Please see the attached EJ Clearance memo and indicator analysis. We are requesting clearance to issue a construction permit for one coarse gravity table aspiration cyclone collector, one fine gravity table aspiration cyclone collector, two degerminator cyclone collectors, and two satake aspiration cyclone collectors, all six new emission units controlled by a filter and to send the draft FESOP for a Corn Mill and Grain Elevator to public notice. The source is changing from CAAPP to FESOP. There will be net decreases in NOx (131.14 tons/year), PM (121.33 tons/year), SO2 (1,264.39 tons/year), and VOM (1,868.44 tons/year). The current due date for the construction permit is on July 7, 2022 and the FESOP has been pending since 2011. Thank you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Bailey, Sabrina <Sabrina.Bailey@Illinois.gov>
Sent: Tuesday, July 5, 2022 3:03 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Cc: Marr, Bill <Bill.Marr@illinois.gov>; Barria, German <German.Barria@Illinois.gov>
Subject: Re: Bunge North America, Inc. (I.D. No.: 183020ABT) - EJ Indicator Analysis request

Request attached.

Sabrina Bailey, PhD
Office of Community Relations
Illinois EPA
(847) 294-4394
Sabrina.Bailey@illinois.gov

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Tuesday, July 5, 2022 1:45 PM
To: Bailey, Sabrina <Sabrina.Bailey@Illinois.gov>
Cc: Marr, Bill <Bill.Marr@illinois.gov>; Barria, German <German.Barria@Illinois.gov>
Subject: Bunge North America, Inc. (I.D. No.: 183020ABT) - EJ Indicator Analysis request

EJ Indicator Analysis request:
Bunge North America, Inc.
I.D. No.: 183020ABT
Address: 321 E. North Street, Danville, Vermilion County

Bob Bernoteit

FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

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Company
Bunge North America, Inc
183020ABT
321 E. North Street
Danville, 61832
Vermilion County

Environmental Indicators	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Lead Paint (% pre-1960s housing)	0.86	0.4	92	0.37	93	0.28	95
2017 Diesel Particulate Matter (ug/m3)	0.24	0.407	29	0.279	<50th	0.295	<50th
2017 Air Toxics Cancer Risk (risk per MM)	20	29	29	24	60-70th	29	<50th
2017 Air Toxics Respiratory HI	0.3	0.38	43	0.3	70-80th	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	470	760	61	610	66	710	67
Wastewater Discharge (toxicity-weighted concentration/m distance)	1.1	36	86	9	94	12	93
Superfund Proximity (site count/km distance)	0.17	0.095	91	0.13	83	0.13	81
RMP Facility Proximity (facility count/km distance)	0.92	1.2	58	0.83	70	0.75	74
Hazardous Waste Proximity (facility count/km distance)	2.8	2.7	66	1.8	79	2.2	77
Ozone (ppb)	44.2	45.3	10	43.5	47	42.6	68
Particulate Matter 2.5 (ug/m3)	8.83	9.96	2	8.96	40	8.74	56
Underground Storage Tanks	15	8	81	4.8	90	3.9	93

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

Source: Bunge North America, Inc.

Location: 321 E. North Street, Danville, Vermilion County

Project: Application is for a construction permit to install one coarse gravity table aspiration cyclone collector, one fine gravity table aspiration cyclone collector, two degerminator cyclone collectors, and two satake aspiration cyclone collectors, all six new emission units controlled by a filter. The application is also for a Federally Enforceable State Operating Permit (FESOP) for a Corn Mill and Grain Elevator. The source was previously permitted to operate a Corn and Soybean Processing plant utilizing solvent extraction to manufacture corn and soybean oils under a CAAPP permit. The construction permit will limit PM emissions to a total of 3.05 tons/year. The emissions increase will be offset by shut of the corn and soybean oil extraction processes and the sources coal fired boilers. The net change in the permitted emissions of the source will result in decreases in NO_x (131.14 tons/year), PM (121.33 tons/year), SO_2 (1,264.39 tons/year), and VOM (1,868.44 tons/year). In addition, the source was previously permitted to emit 109.9 tons/year of an individual HAP (hexane) and will now be classified as a minor source of HAP emissions as a result of the shut down of the solvent extraction processes.

Public/EJ Notice: EJ Notice was provided for this project. No comments, questions, or other expressions of concern or interest were received.

Compliance History: The source was the part of a national consent decree (No. 2:06-cv-02209-MPM-DGB) that was filed on October 26, 2006 for major modifications under PSD without undergoing any review. The consent decree was terminated on July 6, 2012 after the company certified completion of its obligations under the consent decree.

Kras, Kim

From: Marr, Bill
Sent: Tuesday, July 5, 2022 3:18 PM
To: Armitage, Julie
Cc: Bernoteit, Bob; Barria, German
Subject: FW: Bunge North America, Inc. (I.D. No.: 183020ABT) - EJ Clearance request
Attachments: EJ Indicators Bunge North America Inc.xlsx; EJ Clearance Memo 22040008 - Bunge North America, Inc..docx

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EJ Indicator Analysis request:
Bunge North America, Inc.
I.D. No.: 183020ABT
Address: 321 E. North Street, Danville, Vermilion County

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

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Sent: Tuesday, July 5, 2022 4:18 PM
To: Bernoteit, Bob
Cc: Barria, German
Subject: RE: Bunge North America, Inc. (I.D. No.: 183020ABT) - EJ Clearance request

cleared

From: Marr, Bill
Sent: Tuesday, July 5, 2022 3:18 PM
To: Armitage, Julie <Julie.Armitage@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>
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Sent: Tuesday, July 5, 2022 3:13 PM
To: Marr, Bill <Bill.Marr@illinois.gov>
Cc: Barria, German <German.Barria@Illinois.gov>
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Illinojs EPA, Bureau of Air - Permit Section

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EJ Indicator Analysis request:
Bunge North America, Inc.
I.D. No.: 183020ABT
Address: 321 E. North Street, Danville, Vermilion County

Bob Bernoteit
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Illinois EPA, Bureau of Air - Permit Section

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Kras, Kim

From: Marr, Bill
Sent: Wednesday, July 6, 2022 7:43 AM
To: Armitage, Julie
Cc: Bernoteit, Bob
Subject: RE: Bunge Milling/Danville
Attachments: 96020027 - Bunge North America Inc - FESOP - 07-05-2022.docx; 22040008 - Construction Permit Bunge North America Inc - 07-05-2022.docx

yes

From: Armitage, Julie <Julie.Armitage@Illinois.gov>
Sent: Wednesday, July 6, 2022 7:19 AM
To: Marr, Bill <Bill.Marr@illinois.gov>
Subject: FW: Bunge Milling/Danville

Is this the same site? address is the same....pls advise. If the same, we will need to get an inspector over there before you roll. They will need current drafts of permits.

From: McQuillen, Deirdre <Deirdre.McQuillen@Illinois.gov>
Sent: Wednesday, July 6, 2022 7:11 AM
To: Robeen, Ron <Ron.Robeen@Illinois.gov>
Cc: Armitage, Julie <Julie.Armitage@Illinois.gov>; Mohr, Kent <Kent.Mohr@Illinois.gov>
Subject: Bunge Milling/Danville

A2022-0630-002

Let me know how you'd like to handle.

Thanks.

Illinois EPA
Bureau of Air
Bureau Chief's Office
Phone: 217-558-0073
Fax: 217-557-2559
MC# 40

From: howard.donna@epa.gov <howard.donna@epa.gov>
Sent: Friday, July 1, 2022 7:05 AM
To: McQuillen, Deirdre <Deirdre.McQuillen@Illinois.gov>
Subject: [External] FWD: (CAA - FY22-250168-3714-CV) Regional Tip and/or Complaint - Illinois

07/01/2022

SUBJECT: FWD: (CAA - FY22-250168-3714-CV) Regional Tip and/or Complaint - Illinois
FROM: howard.donna@epa.gov

TO: Deirdre.McQuillen@illinois.gov
CC:

-----Original Message-----

6/30/2022 3:32 PM

HQ LEAD NUMBER: FY22-250168-3714-CV

SUBJECT: Regional Tip and/or Complaint - Illinois

FROM:

TO:

Alleged Violator's Name: BUNGE MILLING

Alleged Violator's Address: 321 E NORTH ST

Alleged Violator's City: DANVILLE

Alleged Violator's State: Illinois

Alleged Violator's Zip: 61832

Alleged Violator's Latitude / Longitude: 40.126880 / -87.622010

Alleged Violator's FRS ID: 110041189923

Tip or Complaint: No filters on grain milling exhaust systems. Grain Dust particular is unbelievable 3 blocks east of of plant. A retired employee told me that is why Danville people have to wash your car's so much and you can't keep windows open on nice nites. This is also the possible reason for my wife and kids allergies. Please just check into this , I have no photos.

Violation Still Occurring? Yes

State DEP/DEQ/DEM Notified? No

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;

AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;

3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;

Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than

major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator,

except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP

emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local

law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate

matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of

750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation

and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and

the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 1090.305(a), except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305.

b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.

c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:

i. Minimum cetane index of 40.

ii. Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility

property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

   vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated

under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
Railcar Dump Pit	0.0017	27,000	0.39	1.70
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Grain Receiving Fugitives				5.40
			Total:	11.88

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05
			Total:	30.85

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Throughput (T/Mo)	(T/Yr)	EMISSIONS (lb/T)	PM (T/Mo)	(T/Yr)	(lb/T)	PM_{10} (T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition,

Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and

malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or

USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to

demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and

(d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process

rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

25. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to

500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

26a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

27a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records

and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding

opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

28. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

29a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after

the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 32(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for

inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

33. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

34a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site

rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

i. An existing stationary CI RICE located at an area source of HAP emissions.

ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January

31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

35. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

36a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

37a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			11.88	11.88		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			30.85	30.85		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.37	65.20	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Kras, Kim

From: Marr, Bill
Sent: Friday, July 8, 2022 2:04 PM
To: Michelle Bublitz
Cc: James Burris; Bernoteit, Bob
Subject: RE: Bunge Danville Project

Yes, management approved of the approach.

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 8, 2022 1:45 PM
To: Marr, Bill <Bill.Marr@illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] Bunge Danville Project

Hi Bill, I wanted to follow up and see if you had received any feedback from your management regarding our plan for proceeding with issuance of the construction permit and the FESOP for the Bunge Danville facility.

Thanks
Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385
BUNGE

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Kras, Kim

From: Barria, German
Sent: Wednesday, July 13, 2022 2:01 PM
To: Nation, Trent; Walton, Marlisha M.; Rothenberg, Marcus A.; Edwards, Danielle
Subject: RE: Bunge North America Inc - ID #183020ABT
Attachments: 22040008 - Construction Permit Bunge North America Inc - 07-13-2022.docx; 96020027 - Bunge North America Inc - FESOP - 07-05-2022.docx

Trent,

Please replace the version of the final with this new version for this construction permit 22040008.
Also prepare the FESOP draft 96020027 for notice.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Nation, Trent <Trent.Nation@Illinois.gov>
Sent: Tuesday, July 5, 2022 4:21 PM
To: Barria, German <German.Barria@Illinois.gov>; Walton, Marlisha M. <Marlisha.Walton@Illinois.gov>; Rothenberg, Marcus A. <Marcus.A.Rothenberg@Illinois.gov>; Edwards, Danielle <Danielle.Edwards2@Illinois.gov>
Subject: RE: Bunge North America Inc - ID #183020ABT

This is done and printed.

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, July 5, 2022 3:58 PM
To: Nation, Trent <Trent.Nation@Illinois.gov>; Walton, Marlisha M. <Marlisha.Walton@Illinois.gov>; Rothenberg, Marcus A. <Marcus.A.Rothenberg@Illinois.gov>; Edwards, Danielle <Danielle.Edwards2@Illinois.gov>
Subject: Bunge North America Inc - ID #183020ABT

Please prepare final for the attached construction permit #22040008.

Thank you.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;

AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;

3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;

Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than

major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator,

except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP

emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local

law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate

matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of

750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation

and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and

the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 1090.305(a), except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305.

b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.

c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:

i. Minimum cetane index of 40.

ii. Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility

property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

   vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated

under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
Railcar Dump Pit	0.0017	27,000	0.39	1.70
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Grain Receiving Fugitives				5.40
			Total:	11.88

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #' Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05
			Total:	30.85

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	EMISSIONS PM & PM_{10} (Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Throughput (T/Mo)	Throughput (T/Yr)	EMISSIONS PM (lb/T)	EMISSIONS PM (T/Mo)	EMISSIONS PM (T/Yr)	EMISSIONS PM_{10} (lb/T)	EMISSIONS PM_{10} (T/Mo)	EMISSIONS PM_{10} (T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition,

Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and

malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or

USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to

demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and

(d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of 'Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process

rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

25. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to

500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

26a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

27a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records

and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding

opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

28. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

29a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after

the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 32(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for

inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

33. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

34a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site

rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

i. An existing stationary CI RICE located at an area source of HAP emissions.

ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January

31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

35. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

36a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

37a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			11.88	11.88		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			30.85	30.85		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.37	65.20	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opácity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Kras, Kim

From: Nation, Trent
Sent: Wednesday, July 13, 2022 2:59 PM
To: Barria, German; Walton, Marlisha M.; Rothenberg, Marcus A.; Edwards, Danielle
Subject: RE: Bunge North America Inc - ID #183020ABT
Attachments: 22040008.doc; 96020027 DRAFT 22-07-13.doc

These are done.

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 13, 2022 2:01 PM
To: Nation, Trent <Trent.Nation@Illinois.gov>; Walton, Marlisha M. <Marlisha.Walton@Illinois.gov>; Rothenberg, Marcus A. <Marcus.A.Rothenberg@Illinois.gov>; Edwards, Danielle <Danielle.Edwards2@Illinois.gov>
Subject: RE: Bunge North America Inc - ID #183020ABT

Trent,

Please replace the version of the final with this new version for this construction permit 22040008.
Also prepare the FESOP draft 96020027 for notice.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Nation, Trent <Trent.Nation@Illinois.gov>
Sent: Tuesday, July 5, 2022 4:21 PM
To: Barria, German <German.Barria@Illinois.gov>; Walton, Marlisha M. <Marlisha.Walton@Illinois.gov>; Rothenberg, Marcus A. <Marcus.A.Rothenberg@Illinois.gov>; Edwards, Danielle <Danielle.Edwards2@Illinois.gov>
Subject: RE: Bunge North America Inc - ID #183020ABT

This is done and printed.

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, July 5, 2022 3:58 PM
To: Nation, Trent <Trent.Nation@Illinois.gov>; Walton, Marlisha M. <Marlisha.Walton@Illinois.gov>; Rothenberg, Marcus A. <Marcus.A.Rothenberg@Illinois.gov>; Edwards, Danielle <Danielle.Edwards2@Illinois.gov>
Subject: Bunge North America Inc - ID #183020ABT

Please prepare final for the attached construction permit #22040008.

Thank you.

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;

AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;

3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;

#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to

obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading

station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission

limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling

and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be

employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column

dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during

periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to

500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition

the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following

RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

   i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

   ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

   iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 1090.305(a), except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305.

b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.

c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:

   i. Minimum cetane index of 40.

ii. Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the

Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such

operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
Railcar Dump Pit	0.0017	27,000	0.39	1.70
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Grain Receiving Fugitives				5.40
			Total:	11.88

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
West Meal Dryer	0.0006	13,295	0.07	0.30
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
			Total:	30.85

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

	Throughput		E M I S S I O N S					
				PM			PM_{10}	
Emission Unit	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

	Emissions		
Pollutant	(lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

	Emissions		
Pollutant	(lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions ($lbs/10^3$ Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

	Emission Factor	Emissions

Pollutant	(lb/hp hr)	(lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in

this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each

run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the

oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the

discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling

during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate,

minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

25. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

26a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

27a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records

and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total

amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

28. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

29a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be

retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a

record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 32(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

33. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

34a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

i. An existing stationary CI RICE located at an area source of HAP emissions.

ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submi the report . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in CFR 63.6650(h)(2 (3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you

must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

35. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

36a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

37a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			11.88	11.88		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			30.85	30.85		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.37	65.20	0.51	3.16

GB:tan

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as

General provisions citation	Subject of citation	Applies to subpart	Explanation
			specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.

General provisions citation	Subject of citation	Applies to subpart	Explanation
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)	COMS-related report	No	Subpart ZZZZ does not

General provisions citation	Subject of citation	Applies to subpart	Explanation
(ii)			require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

Kras, Kim

From: Barria, German
Sent: Thursday, July 21, 2022 11:32 AM
To: Bernoteit, Bob
Subject: FW: Waiver - Const.docx

fyi

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Thursday, July 21, 2022 11:22 AM
To: Barria, German <German.Barria@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German and Bill, it's definitely concerning that after our call a couple of weeks ago and confirmation that the construction permit could be issued before the end of July that IEPA is asking for additional time to issue the construction permit. The draft permit has been reviewed and its final form is ready for signature.

Bunge has started review of the FESOP and does have comments but would like to ask IEPA to move forward with processing the draft permit and Bunge will provide comments during the public comment period. If you prefer, Bunge can provide comments on the draft FESOP prior to it going to public notice, but comments won't be completed until September 1. If IEPA can plan on sending the draft FESOP to public notice in early September, Bunge can supply comments in advance of the public notice period, as long as this option does not prevent the construction permit from being issued by August 1.

Bunge is also unsure why the recent inspection should impact the issuance of the construction permit. This is a minor modification with no net increase in emissions for a project that is critically important to Bunge's business. Bunge respectfully requests that IEPA please move the construction permit issuance forward and issue by August 1.

Sincerely,
Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 20, 2022 3:22 PM
To: James Burris <James.Burris@bunge.com>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Waiver - Const.docx

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Hello Jim,

I was told that we will need another waiver, the first of August is coming quick, and although we can put the requirement for a fugitive dust plan in the FESOP of within 90 days of issuance of the FESOP,
We still need comments on the draft permit, or a statement that indicates that it is ok to move forward with the draft as is. It is my understanding that there was an inspection recently, we will need to wait for the field inspection report.
I will say another waiver until September 1, hopefully we can moved the permits sometime during the month of august though.

German Barria
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IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Thursday, July 7, 2022 7:47 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German,

Attached is a pdf copy of the signed 90-day waiver letter. It is also being sent via registered mail.

Let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, July 5, 2022 1:57 PM
To: James Burris <James.Burris@bunge.com>
Subject: FW: Waiver - Const.docx

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I resending you the template waiver letter.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Barria, German
Sent: Wednesday, June 22, 2022 2:41 PM
To: James Burris <James.Burris@bunge.com>
Subject: Waiver - Const.docx

Attached is what we will ask a waiver of the 90-days

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Kras, Kim

From: Marr, Bill
Sent: Thursday, July 21, 2022 12:57 PM
To: Michelle Bublitz
Cc: James Burris; Barria, German; Bernoteit, Bob
Subject: RE: Waiver - Const.docx

During the call, it was agreed upon that the construction permit would be issued at the same time the draft FESOP is sent to public notice in order to make the emissions offset credible. It is my understanding that staff is awaiting comments on the draft FESOP at this time. IEPA prefers that Bunge provide comments on the draft FESOP prior to public notice.

Regarding the inspection, the Permit Section will need clearance from other Sections of the Bureau prior to any permit issuance.

Thanks

William D. Marr, Manager
Bureau of Air, Permit Section
Illinois EPA
217/557-0312
Bill.Marr@illinois.gov

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Protection Agency

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Kras, Kim

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 22, 2022 7:45 AM
To: Marr, Bill
Cc: James Burris; Barria, German; Bernoteit, Bob
Subject: [External] RE: Waiver - Const.docx

Is it possible to meet the August 1 date for issuing the construction permit if we can turn around FESOP comments early next week.

Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Marr, Bill <Bill.Marr@illinois.gov>
Sent: Thursday, July 21, 2022 12:57 PM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Cc: James Burris <James.Burris@bunge.com>; Barria, German <German.Barria@Illinois.gov>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: RE: Waiver - Const.docx

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During the call, it was agreed upon that the construction permit would be issued at the same time the draft FESOP is sent to public notice in order to make the emissions offset credible. It is my understanding that staff is awaiting comments on the draft FESOP at this time. IEPA prefers that Bunge provide comments on the draft FESOP prior to public notice.

Regarding the inspection, the Permit Section will need clearance from other Sections of the Bureau prior to any permit issuance.

Thanks

William D. Marr, Manager
Bureau of Air, Permit Section
Illinois EPA

217/557-0312
Bill.Marr@illinois.gov

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Thursday, July 21, 2022 11:22 AM
To: Barria, German <German.Barria@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German and Bill, it's definitely concerning that after our call a couple of weeks ago and confirmation that the construction permit could be issued before the end of July that IEPA is asking for additional time to issue the construction permit. The draft permit has been reviewed and its final form is ready for signature.

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Bunge is also unsure why the recent inspection should impact the issuance of the construction permit. This is a minor modification with no net increase in emissions for a project that is critically important to Bunge's business. Bunge respectfully requests that IEPA please move the construction permit issuance forward and issue by August 1.

Sincerely,
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BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 20, 2022 3:22 PM
To: James Burris <James.Burris@bunge.com>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Waiver - Const.docx

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Hello Jim,

I was told that we will need another waiver, the first of August is coming quick, and although we can put the requirement for a fugitive dust plan in the FESOP of within 90 days of issuance of the FESOP,
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I will say another waiver until September 1, hopefully we can moved the permits sometime during the month of august though.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Thursday, July 7, 2022 7:47 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German,

Attached is a pdf copy of the signed 90-day waiver letter. It is also being sent via registered mail.

Let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, July 5, 2022 1:57 PM
To: James Burris <James.Burris@bunge.com>
Subject: FW: Waiver - Const.docx

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I resending you the template waiver letter.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: Barria, German
Sent: Wednesday, June 22, 2022 2:41 PM
To: James Burris <James.Burris@bunge.com>
Subject: Waiver - Const.docx

Attached is what we will ask a waiver of the 90-days

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Kras, Kim

From: Marr, Bill
Sent: Friday, July 22, 2022 11:26 AM
To: Michelle Bublitz
Cc: James Burris; Barria, German; Bernoteit, Bob
Subject: RE: Waiver - Const.docx

Yes, as long as we receive the comments early enough in the week so that we are able to address and send to public notice the draft FESOP by the end of the week. Thanks

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 22, 2022 7:45 AM
To: Marr, Bill <Bill.Marr@illinois.gov>
Cc: James Burris <James.Burris@bunge.com>; Barria, German <German.Barria@Illinois.gov>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: [External] RE: Waiver - Const.docx

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IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

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Kras, Kim

From: Barria, German
Sent: Friday, July 22, 2022 11:55 AM
To: Bernoteit, Bob
Subject: 96020027 - Bunge North America Inc - FESOP - 07-22-2022.docx
Attachments: 96020027 - Bunge North America Inc - FESOP - 07-22-2022.docx

Edit the opacity testing condition on page 38 &39.
If you have a chance let me know if that looks ok.

Thanks

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;

AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;

3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;

#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to

obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60. 300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading

station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission

limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling

and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be

employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column

dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during

periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to

500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition

the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following

RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

   i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

   ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

   iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 1090.305(a), except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305.

b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.

c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:

   i. Minimum cetane index of 40.

ii. Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the

Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such

operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
Railcar Dump Pit	0.0017	27,000	0.39	1.70
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Grain Receiving Fugitives				5.40
			Total:	11.88

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
West Meal Dryer	0.0006	13,295	0.07	0.30
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
			Total:	30.85

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

			EMISSIONS					
	Throughput			PM			PM_{10}	
Emission Unit	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

	Emissions		
Pollutant	(lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

	Emissions		
Pollutant	(lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

	Emission Factor	Emissions

Pollutant	(lb/hp hr)	(lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in

this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each

run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the

oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the

discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations to determine visual emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted once every (1/4) quarter of the year from the preceding testing date.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill

Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be

representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

25. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

26a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

27a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records

and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total

amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

28. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

29a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be

retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a

record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 32(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

33. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

34a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

i. An existing stationary CI RICE located at an area source of HAP emissions.

ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in CFR 63.6650(h)(2)(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you

must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

35. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

36a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

37a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			11.88	11.88		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			30.85	30.85		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.37	65.20	0.51	3.16

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Attachment B - Table 8 to Subpart ZZZZ of Part 63-Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as

General provisions citation	Subject of citation	Applies to subpart	Explanation
			specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.

General provisions citation	Subject of citation	Applies to subpart	Explanation
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)	COMS-related report	No	Subpart ZZZZ does not

General provisions citation	Subject of citation	Applies to subpart	Explanation
(ii)			require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

Kras, Kim

From: Bernoteit, Bob
Sent: Friday, July 22, 2022 1:20 PM
To: Barria, German
Cc: Marr, Bill
Subject: RE: 96020027 - Bunge North America Inc - FESOP - 07-22-2022.docx
Attachments: 96020027 - Bunge North America Inc - FESOP - 07-22-2022.docx

German,

Please revise Condition 23(a)(i) as follows:

> i. Conduct ~~opacity~~ observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted ~~once every (1/4)~~ on a quarterly basis ~~of the year from~~ no later than 30 days after the end of the preceding ~~testing date~~ calendar quarter.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Friday, July 22, 2022 11:55 AM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: 96020027 - Bunge North America Inc - FESOP - 07-22-2022.docx

Edit the opacity testing condition on page 38 &39.
If you have a chance let me know if that looks ok.

Thanks

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Bunge North America, Inc.
Attn: Dean Hughes
11720 Borman Drive
St. Louis, Missouri 63146-1000

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;

AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;

3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;

#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to

obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading

station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission

limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling

and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be

employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

l. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column

dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;

b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;

7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.

8. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during

periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

10a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to

500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition

the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following

RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

1. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

   i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

   ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

   iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 1090.305(a), except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305.

b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.

c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:

   i. Minimum cetane index of 40.

ii. Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the

Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas or distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such

operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
Railcar Dump Pit	0.0017	27,000	0.39	1.70
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Grain Receiving Fugitives				5.40
			Total:	11.88

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
West Meal Dryer	0.0006	13,295	0.07	0.30
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Tables	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
			Total:	30.85

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

			E M I S S I O N S					
	Throughput		PM			PM_{10}		
Emission Unit	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

		Emissions	
Pollutant	(lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

		Emissions	
Pollutant	(lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

	Emission Factor	Emissions

Pollutant	(lb/hp hr)	(lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in

this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each

run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the

oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the

discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations to determine visual emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted once every (1/4) quarter of the year from the preceding testing date.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill

Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be

representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.

25. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

26a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

27a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. Pursuant to 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records

and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

i. Calendar dates covered in the reporting period.

ii. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

c. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

i. The name of the oil supplier;

ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

iii. The sulfur content of the oil.

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total

retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be

retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a

record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 32(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

33. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

34a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

i. An existing stationary CI RICE located at an area source of HAP emissions.

ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you

must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

35. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

36a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

37a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			11.88	11.88		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			30.85	30.85		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.37	65.20	0.51	3.16

GB:tan

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as

General provisions citation	Subject of citation	Applies to subpart	Explanation
			specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.

General provisions citation	Subject of citation	Applies to subpart	Explanation
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)	COMS-related report	No	Subpart ZZZZ does not

General provisions citation	Subject of citation	Applies to subpart	Explanation
(ii)			require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

   a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

   b. Maintain the following records for a period of no less than two (2) years:

      i. Date and duration of malfunction, breakdown, or startup,

      ii. Full and detailed explanation of the cause,

      iii. Contaminants emitted and an estimate of quantity of emissions,

      iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

      v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

Barria, German

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Wednesday, July 27, 2022 12:37 PM
To: Barria, German
Cc: James Burris
Subject: [External] RE: Waiver - Const.docx
Attachments: 96020027 - Bunge North America Inc - FESOP - 07-05-2022 - Bunge Comments.docx; Danville - FESOP Emission Limits Documentation.docx; FESOP - Emission Unit Comparison FESOP to Actual - July 24, 2022 jb.xlsx

German, please find attached Bunge's comments on the draft FESOP as well as a spreadsheet with our review and comments on appropriate emissions limits for facility sources and emission limit justification information. In addition to our comments included in the word document, please see the following comments:

- Bunge requests that the FESOP indicate that the conditions and limits in the FESOP (once issued) supersede conditions and limits in all previous construction and operating permits.
- The facility is a minor source of hazardous air pollutants
- The two plant boilers are capable of only burning natural gas. They were originally permitted to burn fuel oil and propane as backup but are not longer capable of burning those fuels.
- The proposed emissions limits for the boilers are based on a heat content higher than 1000 Btu/scf. Bunge suggests the limits should be based on a heat content of 1000 Btu/scf
- Remove references to specific filter/cyclone devices in the emission unit description. Replacement of filters/cyclones is exempt from permitted under 201.146(hhh). Would not want a new filter/cyclone to not match what is listed in the permit.
- Bunge's proposed emission limits are based on grain loading factors that are achievable and can be demonstrated. The justification for the grain loading values used to calculate "FESOP PTE" is included on the attached document "Grain Loading-Emission Limit Documentation".
- A comparison of emission unit information and emission limit information in the draft and Bunge's proposed descriptions and limits is attached. A couple of things to note
    - Bunge left this in excel form for each of copying and pasting
    - Columns B-I contain information from the FESOP draft.
    - Columns J, K, and Y-AE were for Bunge's internal comparison purposes
    - Bunge believes that the following information should be used to replace the information in the current draft
        - Columns M, N, P, Q, R, S, T-W
- Bunge strongly requests that IEPA remove the requirement to stack test all of the processing sources at the location within 90 days of permit issuance. This facility has roughly 135 sources that IEPA is proposing to require stack testing within 90 days of permit issuance and then again every 5 years. This is an incredibly onerous requirement and in many cases is not feasible.
    - Bunge is proposing emission limits that are based on reasonable grain loading rates from filters and cyclones.
    - These limits are achievable by well operated and maintained equipment.
    - Many of the sources are in areas that can not accommodate stack testing equipment
    - Many of the sources are not intended to operate in a manner that accommodates stack testing
        - Filter that only operate for a short time during material conveying
        - Bin vent filters

Sincerely,

Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 20, 2022 3:22 PM
To: James Burris <James.Burris@bunge.com>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Waiver - Const.docx

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Hello Jim,

I was told that we will need another waiver, the first of August is coming quick, and although we can put the requirement for a fugitive dust plan in the FESOP of within 90 days of issuance of the FESOP,
We still need comments on the draft permit, or a statement that indicates that it is ok to move forward with the draft as is. It is my understanding that there was an inspection recently, we will need to wait for the field inspection report.
I will say another waiver until September 1, hopefully we can moved the permits sometime during the month of august though.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Thursday, July 7, 2022 7:47 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German,

Attached is a pdf copy of the signed 90-day waiver letter. It is also being sent via registered mail.

Let me know if you have any questions.

Jim Burris, PE

Phone: 314-292-2937

Mobile: 314-308-3904

1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, July 5, 2022 1:57 PM
To: James Burris <James.Burris@bunge.com>
Subject: FW: Waiver - Const.docx

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

I resending you the template waiver letter.

German Barria

Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: Barria, German
Sent: Wednesday, June 22, 2022 2:41 PM
To: James Burris <James.Burris@bunge.com>
Subject: Waiver - Const.docx

Attached is what we will ask a waiver of the 90-days

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

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If you received this message in error, please notify us immediately by telephone at +1 314 292-2000 and immediately delete this message from your system.
If you are not the intended recipient, you must not use, disclose, distribute or copy any part of this message.

Boiler Natural Gas limits are based on a heat content higher than 1,000 Btu/CF. Using 1,000 Btu/CF the annual limits should be:

Boiler (MMBTu/hr)	Fuel Use (MMCF/yr)	CO (tpy)	NOx (tpy)	PM/PM10 (tpy)	SO2 (tpy)	VOC (tpy)
B&W (96.55)	845.8	35.52	21.14	3.21	0.25	2.33
Clayton (27.90)	244.4	10.26	12.22	0.93	0.07	0.67

Changes to emission unit (filter and cyclone) grain loading based on what is achievable and can be demonstrated. Below is the justification for the grain loading values used to calculate FESOP PTE.

Cell F15
Truck Dump No.
Stack Test Nov 15, 1999 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.00165	0.00165	0.0020	0.002

Use 90% CI and expected filter grain loading.

Cell F16/F17
Truck Dump No. 2 (and all other grain receiving baghouses)
Stack Test Feb 22, 2007 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.00017	0.00017	0.00031	0.002
PM10	0.00035	0.00017	0.00031	0.0015

Use 0.002 for PM, expected filter grain loading and because the stack test showed good values, use 0.0015 for PM10 (75% of 0.002).

Cell F18
Vacuum System Filters
Stack Test None

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.001	-	-	0.001

Expected value for vacuum filters.

Cell F19
LTMS Handling Aspiration Filter (grain handling aspiration)
Stack Test Oct 8, 2004 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.00129	0.00129	0.0015	0.0015

Use 90% CI.

Cell F37/F38
Corn Cleaning Filter (three corn cleaning filters)
Stack Test Sep 13, 2000 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP

PM	0.00063	0.00063	0.0011	0.002
PM10	0.00087	0.00063	0.0011	0.0015

Use 0.002 for PM, expected filter grain loading and because the stack test showed good values, use 0.0015 for PM10 (75% of 0.002).

Cell F39/F40
Bran/Camas Milling Aspiration
Stack Test Sep 13, 2000 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.00063	0.00034	0.00041	0.002
PM10	0.00087	0.00034	0.00041	0.0015

Use 0.002 for PM, expected filter grain loading and because the stack test showed good values, use 0.0015 for PM10 (75% of 0.002).

Cell F41/F42
S. Lunchroom Corn Milling Aspiration (use for all dry corn milling processing filters)
Stack Test Sep 14, 2000 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.00063	0.00037	0.00047	0.002
PM10	0.00087	0.00037	0.00047	0.0015

Use 0.002 for PM, expected filter grain loading and because the stack test showed good values, use 0.0015 for PM10 (75% of 0.002).

Cell F43/F44
Destrehan Esher Wyss Dryer Cyclone Stack Test (use only for whole grain dryer cyclone)
Stack Test Mar 22, 2016 Method 201A/202

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.03597	0.00040	0.00052	0.030
PM10	0.02536	0.00364	0.00432	0.020

Stack Test values from Destrehan look pretty good, but cyclone emission with condensables can be unpredictable, use a realistically expected grain loading.

Cell F45/F94
One other dry corn mill process cyclone and two specialty milling cyclones
Stack Test None

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.020	-	-	0.020

Use expected cyclone grain loading.

Cell F95
Two specialty milling filters installed after 2015
Stack Test None

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.0020	-	-	0.0020

Use expected filter grain loading.

Cell F96/F97 and F192/F193

S Lunchroom Filter (80 specialty milling filters installed prior to 2015 and 8 hominy feed mill filters)
Stack Test Sep 14, 2000 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.00037	0.00037	0.00047	0.002
PM10	0.00060	0.00037	0.0047	0.0015

Use 0.002 for PM, expected filter grain loading and because the stack test showed good values, use 0.0015 for PM10 (75% of 0.002).

Cell F95
Rail Loadout Filter (single filter only)
Stack Test Feb 10, 2011 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.00067	0.00067	0.00071	0.0020

Use expected filter grain loading.

Cell F96/F497
Tail Stock Dryer Cyclone (use only three dryer cyclones)
Stack Test Sep 13, 2000 Method 5 and 201A/202

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.0454	0.0454	0.052	0.0454
PM10	0.00193	0.00193	0.002	0.0020

Pm uses stack test average, PM10 uses expected filter and stack test 90% CI..

IEPA FESOP Draft Emission Unit Desription	Permit Condition	Vaues from the IEPA draft FESOP Grain Loading (gr/dscf)	Exhaust Flow (scfm)	Emisison Limits PM/PM10 (lb/hr)	(tpy)	Calc'd (lb/hr)	Calc'd (tpy)
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)							
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;	17a	0.0017	18,500	0.30	1.20	0.27	1.18
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;	17a	0.0017	1,000	0.02	0.10	0.01	0.06
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;	17a	0.0017	55,000	0.78	3.40	0.80	3.51
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12;	17a	0.0017	27,000	0.39	1.70	0.39	1.72
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;	17a	0.0017	700	0.01	0.04	0.01	0.04
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;	17a	0.0006	1,900	0.01	0.04	0.01	0.04
Grain Receiving Fugitives	17a				5.40		5.40
					11.88		**11.95**
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):							
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;	17b	0.0017	36,017	0.52	2.30	0.52	2.30
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;	17b	0.00085	41,000	0.30	1.31	0.30	1.31
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;	17b	0.00085	57,372	0.42	1.83	0.42	1.83
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;	17b	0.0017	20,000	0.29	1.28	0.29	1.28
					6.72		**6.72**
Dry Corn Milling, Processing and Products Handling:							
Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;	17c	0.0006	1,660	0.01	0.04	0.01	0.04
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;	17c	0.0006	3,400	0.02	0.08	0.02	0.08
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;	17c	0.0006	4,400	0.02	0.10	0.02	0.10
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;	17c	0.0006	2,800	0.01	0.06	0.01	0.06
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;	17c	0.0006	8,230	0.04	0.19	0.04	0.19
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;	17c	0.0006	13,000	0.07	0.29	0.07	0.29
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;	17c	0.0006	13,295	0.07	0.30	0.07	0.30
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;	17c	0.0006	42,000	0.22	0.95	0.22	0.95
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;	17c	0.0006	69,500	0.36	1.57	0.36	1.57
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;	17c	0.0006	1,500	0.01	0.03	0.01	0.03
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;	17c	0.0006	36,000	0.19	0.81	0.19	0.81
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;	17c	0.0006	1,500	0.01	0.03	0.01	0.03
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;	17c	0.0006	1,960	0.01	0.04	0.01	0.04
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;	17c	0.0006	10,000	0.05	0.23	0.05	0.23
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;	17c	0.0006	10,000	0.05	0.23	0.05	0.23

	South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;	17c	0.0006	42,000	0.22	0.95	0.22	0.95
	South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;	17c	0.0006	37,500	0.19	0.84	0.19	0.84
	North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;	17c	0.0006	30,000	0.15	0.68	0.15	0.68
	North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;	17c	0.0006	36,000	0.19	0.81	0.19	0.81
	Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;	17c	0.0006	42,000	0.22	0.95	0.22	0.95
	CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;	17c	0.0006	45,021	0.23	1.01	0.23	1.01
	Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;	17c	0.0006	56,000	0.29	1.26	0.29	1.26
	Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;	17c	0.0006	825	0.01	0.02	0.004	0.02
	Gravity Table #3 (4880-0044-0070)controlled by Baghouse Filters TORIT CPC-12;	17c	0.0006	6,200	0.03	0.14	0.03	0.14
	Gravity Table #4 (4880-0044-0073) controlled by Baghouse Filters TORIT CPC-12;	17c	0.0006	6,200	0.03	0.14	0.03	0.14
	Gravity Table #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;	17c	0.0006	6,200	0.03	0.14	0.03	0.14
	Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;	17c	0.0006	440	0.01	0.01	0.002	0.01
X	GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;	17c	0.0006					
	Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;	17c	0.0006	900	0.01	0.02	0.0046	0.02
	AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;	17c	0.0006	742	0.01	0.02	0.0038	0.02
	AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;	17c	0.0006	742	0.01	0.02	0.0038	0.02
	1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;	17c	0.0006	380	0.01	0.01	0.002	0.01
	1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;	17c	0.0006	380	0.01	0.01	0.002	0.01
	3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;	17c	0.0006	380	0.01	0.01	0.002	0.01
	9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
	7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
	#3 Pulvocron (4990-0002-0019) controlled by Baghouse	17c	0.0006	2,904	0.01	0.07	0.01	0.07
	#4 Pulvocron (4990-0002-0022) controlled by Baghouse	17c	0.0006	2,904	0.01	0.07	0.01	0.07
	#5 Pulvocron (4900-0001-0039)) controlled by Baghouse	17c	0.0006	2,904	0.01	0.07	0.01	0.07
	#1 Pulvocron (4990-0005-0021) controlled by Baghouse Filter BUHLER 37-8-220;	17c	0.0006	2,904	0.01	0.07	0.01	0.07
	#2 Pulvocron (4990-0005-0024) controlled by Baghouse Filter BUHLER 37-8-220;	17c	0.0006	2,904	0.01	0.07	0.01	0.07
	#7 Pulvocron (4990-0003-0019)controlled by Baghouse Filter APM 16022.8;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
	#8 Pulvocron (4990-0003-0022) controlled by Baghouse Filter APM 16022.8;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
	#9 Pulvocron (4990-0004-0022) controlled by Baghouse Filter APM 16022.8;	17c	0.0006	3,000	0.02	0.07	0.02	0.07

#10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filter APM 16022.8;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;	17c	0.0006	500	0.01	0.01	0.003	0.01
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;	17c	0.0006	500	0.01	0.01	0.003	0.01
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;	17c	0.0006	570	0.01	0.01	0.003	0.01
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;	17c	0.0006	500	0.01	0.01	0.003	0.01
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;	17c	0.0006	500	0.01	0.01	0.003	0.01
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;	17c	0.0006	500	0.01	0.01	0.003	0.01
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;	17c	0.0006	570	0.01	0.01	0.003	0.01
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;	17c	0.0006	570	0.01	0.01	0.003	0.01
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;	17c	0.0006	7,200	0.04	0.16	0.04	0.16
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;	17c	0.0006	4,077	0.02	0.09	0.02	0.09
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;	17c	0.0006	10,000	0.05	0.23	0.05	0.23
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;	17c	0.0006	867	0.01	0.02	0.004	0.02
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	400	0.01	0.01	0.002	0.01
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;	17c	0.0006	4,452	0.02	0.10	0.02	0.1
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;	17c	0.0006	1,435	0.01	0.03	0.01	0.03
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;	17c	0.0006	9,158	0.05	0.21	0.05	0.21
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;	17c	0.0006	700	0.01	0.02	0.004	0.02
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;	17c	0.0006	780	0.01	0.02	0.004	0.02
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;	17c	0.0006	1,100	0.01	0.02	0.01	0.02
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;	17c	0.0006	1,100	0.01	0.02	0.01	0.02
Bin 308 (4990-0002-0033) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Bin 309 (4990-0002-0036) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Bin 310 (4820-0003-0038) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Bin 508 (4820-0002-0068) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Bin 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	509	0.01	0.01	0.003	0.01
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;	17c	0.0006	700	0.01	0.02	0.004	0.02
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;	17c	0.0006	807	0.01	0.02	0.004	0.02
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;	17c	0.0006	6,000	0.03	0.14	0.03	0.14

Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;	17c	0.0006	1,250	0.01	0.03	0.01	0.03
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;	17c	0.0006	1,055	0.01	0.02	0.01	0.02
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;	17c	0.0006	1,645	0.01	0.04	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063) controlled by Baghouse Filters BUHLER 64S-6-20;	17c	0.0006	3,200	0.02	0.07	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;	17c	0.0006	2,739	0.01	0.06	0.01	0.06
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;	17c	0.0006	742	0.01	0.02	0.004	0.02
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;	17c	0.0006	648	0.01	0.01	0.003	0.01
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;	17c	0.0006	2,241	0.01	0.05	0.01	0.05
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;	17c	0.0006	1,232	0.01	0.03	0.01	0.03
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;	17c	0.0006	1,500	0.01	0.03	0.01	0.03
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;	17c	0.0006	1,400	0.01	0.03	0.01	0.03
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;	17c	0.0006	1,000	0.01	0.02	0.01	0.02
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;	17c	0.0006	14,000	0.07	0.32	0.07	0.32
Ingredient Bin 601 (4820-0003-0022) controlled by Baghouse Filters MICROPUL 4B;	17c	0.0006	210	0.01	0.01	0.0011	0.0047
Ingredient Bin 602 (4820-0003-0026) controlled by Baghouse Filters MICROPUL 4B;	17c	0.0006	210	0.01	0.01	0.0011	0.0047
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;	17c	0.0006	210	0.01	0.01	0.0011	0.0047
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;	17c	0.0006	210	0.01	0.01	0.0011	0.0047
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;	17c	0.0006	2,500	0.01	0.06	0.01	0.06
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;	17c	0.0006	1,500	0.01	0.03	0.01	0.03
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;	17c	0.0006	1,258	0.01	0.03	0.01	0.03
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;	17c	0.0006	1,017	0.01	0.02	0.01	0.02
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;	17c	0.0006	27,550	0.14	0.62	0.14	0.62
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;	17c	0.0006	2,904	0.01	0.07	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;	17c	0.0006	570	0.01	0.01	0.003	0.01
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;	17c	0.0006	705	0.01	0.02	0.004	0.02
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;	17c	0.0006	2,143	0.01	0.05	0.01	0.05
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;	17c	0.0006	1,350	0.01	0.03	0.01	0.03

Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;	17c	0.0006	500	0.01	0.01	0.003	0.01
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;	17c	0.0006	2,100	0.01	0.05	0.01	0.05
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;	17c	0.0006	36,000	0.19	0.81	0.19	0.81
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;	17c	0.0006	5,080	0.03	0.11	0.03	0.11
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;	17c	0.0006	37,000	0.19	0.83	0.19	0.83
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;	17c	0.0006	15,000	0.08	0.34	0.08	0.34
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;	17c	0.0006	2,000	0.01	0.05	0.01	0.05
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;	17c	0.0006	6,888	0.04	0.16	0.04	0.16
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;	17c	0.0006	30,000	0.15	0.68	0.15	0.68
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;	17c	0.0006	16,000	0.08	0.36	0.08	0.36
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;	17c	0.0006	7,400	0.04	0.17	0.04	0.17
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;	17c	0.0006	10,000	0.05	0.23	0.05	0.23
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;	17c	0.0006	5,000	0.03	0.11	0.03	0.11
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;	17c	0.0006	6,888	0.04	0.16	0.04	0.16
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;	17c	0.0006	1,600	0.01	0.04	0.01	0.04
Cyclone Receiver - Extrusion Receiver controlled by Baghouse Filters (5&6 Allbond Receiving Filter);	17c	0.02	4,000	0.69	3.00	0.69	3
Cyclone Receiver - 108 A-Bin Receiver controlled by Baghouse Filters (5&6 Allbond Receiving Filter);	17c	0.02	500	0.09	0.38	0.09	0.38
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);	17c	0.02	682	0.12	0.53	0.12	0.51
PCM Hammermill controlled by Filter System (78-03:11);	17c	0.002	7,200	0.12	0.54	0.12	0.54
USG Hammermill controlled by Filter System (78-03:27);	17c	0.002	7,200	0.12	0.54	0.12	0.54
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);	17c	0.02	4,000	0.69	3.00	0.69	3
All these in One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c	0.002	40,600	0.7	3.05	0.7	3.05
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c					0	0
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c					0	0
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c					0	0
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c					0	0

	One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c				0	0	
	Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);	17c				0	0	
X	One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c				0	0	
X	One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c				0	0	
						30.95		30.91
Corn Mill Products Storage:								
	Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;	17d	0.0006	700	0.01	0.02	0.004	0.02
	Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;	17d	0.0006	700	0.01	0.02	0.004	0.02
	Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;	17d	0.0006	21,000	0.11	0.47	0.11	0.47
						0.51		0.51
Corn Mill Products Milling and Handling:								
	Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;	17e	0.0006	30,000	0.15	0.68	0.15	0.68
	Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;	17e	0.0006	21,000	0.11	0.47	0.11	0.47
	Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;	17e	0.0006	34,960	0.18	0.79	0.18	0.79
	Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;	17e	0.0006	34,960	0.18	0.79	0.18	0.79
	Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;	17e	0.0006	20,000	0.10	0.45	0.1	0.45
	LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;	17e	0.0006	34,600	0.18	0.78	0.18	0.78
	Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;	17e	0.0055	8,000	0.38	1.65	0.38	1.65
	Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;	17e	0.0006	7,600	0.04	0.17	0.04	0.17
	Hominy Loadout Fugitives	17e				1.90		1.90
	Grain Loadout Fugitives	17e				0.10		0.10
						7.78		7.78
	LTMS Truck/Rail Dump Pit (4750-0033-0000A);	17e				0.03		0.03
	LTMS Truck Loadout (4750-0033-0000B);	17e				0.54		0.54
						0.57		0.57
Boiler House/Grounds:								

One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);	3.13	3.13
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);	0.9	0.9
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100);	0.08	0.08
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100);	0.08	0.08
	4.19	4.19
	62.60	62.63

Actual Values that should be in the FESOP

FALSE means the value calc'd using IEPA data doesn't match IEPA's value		Emisison Unit Number	Source Name	Fugitive Filter Cyclone	Fugitive Filter Cyclone	Grain L PM (gr/dscf)
FALSE	FALSE	5012-0001-0016	Truck Dump #1	APM 40072.10	Filter	0.002
FALSE	FALSE	5012-0010-0054	Hoffman Bldg 301 Vacuum	HOFFMAN 48X96	Filter	0.001
FALSE	FALSE	5012-0005-0029	West Headhouse General Aspiration	DD 484RF12	Filter	0.0015
TRUE	FALSE	5012-0007-0015	Rail Dump Pit and Section D & E General Aspiration	376RF8	Filter	0.0015
TRUE	TRUE	5012-0010-0047	Track 6 Vacuum	HOFFMAN 48X96	Filter	0.001
TRUE	TRUE	4870-0013-0015	Cleanings Discharge	BUHLER 16S-6-30	Filter	0.002
		5012-0000-0000	Grain Receiving Fugitive	Fugitive	Fugitive	
TRUE	TRUE	5012-0005-0021	Truck Dump #4 w/ Gallery General Aspiration	DD 484RF12	Filter	0.002
TRUE	TRUE	4870-0013-0001	Cleaning North APM	APM 41216.12	Filter	0.002
TRUE	TRUE	4880-0034-0069	Bldg 115 Corn Cleaning	TD 484RF12	Filter	0.002
TRUE	TRUE	5012-0002-0012	North Street Truck Dump #2	DD 484RF12	Filter	0.002
TRUE	TRUE	4870-0010-0055	Bemos Bagging	APM 16019.8	Filter	0.002
TRUE	TRUE	4870-0010-0030	Bagging General Aspiration	APM 40020.8	Filter	0.002
TRUE	TRUE	4870-0013-0019	Bagging Packer General Aspiration	APM 14042.8	Filter	0.002
TRUE	TRUE	4880-0042-0057	Bran Dryer Process	APM 14036.8	Filter	0.002
TRUE	TRUE	4880-0042-0062	Bran Sifter Process	APM 10144.8	Filter	0.002
TRUE	TRUE	4880-0034-0054	East Meal Dryer/Cooler	APM 40120.10	Filter	0.002
TRUE	TRUE	4880-0034-0059	West Meal Dryer	APM 40144.8	Filter	0.002
TRUE	TRUE	4880-0034-0027	Bldg 105/115 General Aspiration	DD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0001	Bldg 102/105 General Aspiration	MCF 144-756	Filter	0.002
TRUE	TRUE	4880-0032-0052	Bldg 105 Vacuum	HOFFMAN 36x96	Filter	0.001
TRUE	TRUE	4870-0021-0001	Bulk Loading White Goods	DD 484RF12	Filter	0.002
TRUE	TRUE	4870-0015-0016	Bldg 104 Vacuum	HOFFMAN 38405A	Filter	0.001
TRUE	TRUE	4880-0042-0054	Bran Bin	BUHLER 16S-6-30	Filter	0.002
TRUE	TRUE	4880-0008-0028	Removed From Service	NA	NA	-
TRUE	TRUE	4880-0008-0040	Removed From Service	NA	NA	-

TRUE	TRUE	4880-0034-0010	South Lunchroom Screening	CD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0042	South CD Screening	CD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0048	North CD General Aspiration	CD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0019	North Lunchroom Screening	CD 484RF12	Filter	0.002
TRUE	TRUE	4870-0013-0024	Packaging and Bulk Loading Bldg 115	TD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0077	Camas/Bran Bldg 115	TD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0071	Thru/Tail Stock Dryers Bldg 115	TD 484RF12	Filter	0.002
FALSE	TRUE	4880-0032-0070	Bldg 115 Vacuum	HOFFMAN S54002	Filter	0.001
TRUE	TRUE	4880-0044-0070	Removed From Service	NA	NA	-
TRUE	TRUE	4880-0044-0073	Removed From Service	NA	NA	-
TRUE	TRUE	4880-0044-0076	Removed From Service	NA	NA	-
FALSE	TRUE	4870-0005-0003	Track 2 Railcar Unloading Secondary Receiver	USS INC. 15CF P/D	Filter	0.002
TRUE	TRUE	4880-0009-0005	Removed From Service	NA	NA	-
FALSE	TRUE	4932-0001-0001	Lab Filter	APM 14106.4	Filter	0.002
FALSE	TRUE	4900-0003-0039	Removed From Service	NA	NA	-
FALSE	TRUE	4900-0003-0045	Removed From Service	NA	NA	-
FALSE	TRUE	4990-0005-0012	1/2 Pulvocron Meal Receiver	BUHLER 9-6-100	Filter	0.002
FALSE	TRUE	4990-0005-0042	1/2 Pulvocron Visc Flour Receiver	BUHLER 9-6-100	Filter	0.002
FALSE	TRUE	4990-0002-0010	3/4 Pulvocron Meal Receiver	BUHLER 9-6-100	Filter	0.002
TRUE	TRUE	4990-0004-0013	9/10 Pulvocron Meal Secondary Receiver	BUHLER 16009.4	Filter	0.002
TRUE	TRUE	4990-0003-0010	7/8 Pulvocron Meal Secondary Receiver	BUHLER 16009.4	Filter	0.002
TRUE	TRUE	4990-0002-0019	#3 Pulvocron	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE	4990-0002-0022	#4 Pulvocron	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE	4900-0001-0039	#5 Pulvocron	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE	4990-0005-0021	#1 Pulvocron	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE	4990-0005-0024	#2 Pulvocron	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE	4990-0003-0019	#7 Pulvocron	APM 16022.8	Filter	0.002
TRUE	TRUE	4990-0003-0022	#7 Pulvocron	APM 16022.8	Filter	0.002
TRUE	TRUE	4990-0004-0022	#9 Pulvocron	APM 16022.8	Filter	0.002

TRUE	TRUE	4990-0004-0025	#10 Pulvocron	APM 16022.8	Filter	0.002
FALSE	TRUE	4990-0002-0008	3/4 Pulvocron Meal Bin	MICROPUL 2 1/2B	Filter	0.002
FALSE	TRUE	4990-0005-0010	1/2 Pulvocron Meal Bin	MICROPUL 2 1/2B	Filter	0.002
FALSE	TRUE	4990-0004-0011	9/10 Pulvocron Meal Bin	APM 16104.4	Filter	0.002
FALSE	TRUE	4990-0003-0008	7/8 Pulvocron Meal Bin	APM 16104.4	Filter	0.002
FALSE	TRUE	4990-0005-0028	1/2 Flour Surge Bin	MICROPUL 2 1/2B	Filter	0.002
FALSE	TRUE	4990-0002-0026	3/4 Flour Surge Bin	MICROPUL 2 1/2B	Filter	0.002
FALSE	TRUE	4990-0003-0026	7/8 Flour Surge Bin	APM 16104.4	Filter	0.002
FALSE	TRUE	4990-0004-0029	9/10 Flour Surge Bin	APM 16104.4	Filter	0.002
TRUE	TRUE	4990-0006-0024	Hibond Visc Flake Roller Mill	APM 15066.8	Filter	0.002
TRUE	TRUE	4820-0001-0029	CSM Blended Food Receiver	APM 40070.7	Filter	0.002
TRUE	TRUE	4820-0001-0052	Blended Food Packaging Aspiration	APM 16150.6	Filter	0.002
FALSE	TRUE	4900-0001-0068	Allbond Visc Four General Aspiration	BUHLER 16-8-100	Filter	0.002
FALSE	TRUE	4820-0003-0007	Milk Bins	MICROPUL 6B	Filter	0.002
TRUE	TRUE	4990-0007-0049	300 Series Binning	MICROPUL 1F1	Filter	0.002
TRUE	TRUE	4990-0001-0002	Soy Meal General Aspiration	APM 16022.4	Filter	0.002
FALSE	TRUE	4990-0001-0006	Soy Meal Surge Bin	MICROPUL 6B	Filter	0.002
TRUE	TRUE	4990-0001-0025	Meal Bin Cooler	APM 40072.10	Filter	0.002
FALSE	TRUE	4990-0002-0043	3/4 Soy Flour Receiver	APM 16014.8	Filter	0.002
FALSE	TRUE	4820-0003-0072	Tri Cal Bins	APM 16009.8	Filter	0.002
TRUE	TRUE	4900-0001-0058	5/6 Allbond Receiver	APM 16014.8	Filter	0.002
TRUE	TRUE	4990-0003-0032	7/8 Soy Flour Receiver	APM 16014.8	Filter	0.002
FALSE	TRUE	4990-0002-0033	Bin 308	MICROPUL 6B	Filter	0.002
FALSE	TRUE	4990-0002-0036	Bin 309	MICROPUL 6B	Filter	0.002
FALSE	TRUE	4820-0003-0038	Bin 310	MICROPUL 6B	Filter	0.002
FALSE	TRUE	4820-0002-0068	Bin 508	MICROPUL 6B	Filter	0.002
FALSE	TRUE	4820-0002-0072	Bin 509	MICROPUL 6B	Filter	0.002
FALSE	TRUE	4990-0004-0037	9/10 Pulvocron Receiver	BUHLER 16-6-220	Filter	0.002
FALSE	TRUE	4820-0002-0038	Milk Bins	MICROPUL 21-6-220	Filter	0.002
TRUE	TRUE	4820-0002-0035	Milk Bin Bag Dump	APM 14048.6	Filter	0.002

TRUE	TRUE	4990-0007-0029	Blending Batch Bin General Aspiration	BUHLER 25S-6-30	Filter	0.002
TRUE	TRUE	4990-0007-0036	Blending General Aspiration	BUHLER 16S-6-30	Filter	0.002
TRUE	TRUE	4990-0007-0032	Blending General Aspiration	MICROPUL 36S-8-30	Filter	0.002
TRUE	TRUE	4820-0003-0063	CSB Binning General Aspiration	BUHLER 64S-6-20	Filter	0.002
TRUE	TRUE	4820-0003-0059	CSB Binning General Aspiration	BUHLER 64S-6-20	Filter	0.002
FALSE	TRUE	4990-0006-0040	Finished Product General Aspiration	BUHLER 9-8-220	Filter	0.002
TRUE	TRUE	4900-0001-0091	#5 SL General Aspiration & #5 Expander	APM 14024.6	Filter	0.002
FALSE	TRUE	4990-0011-0001	Fiber Receiving General Aspiration	BUHLER 9-8-220	Filter	0.002
TRUE	TRUE	4820-0002-0011	PCM Binning	MICROPUL 1F1	Filter	0.002
TRUE	TRUE	4870-0010-0005	CF Bran Packing Binning	MICROPUL 25-8-220	Filter	0.002
TRUE	TRUE	4900-0005-0035	Bldg 111 Vacuum	HOFFMAN 60X120	Filter	0.001
TRUE	TRUE	4870-0006-0006	110/210 Receiver General Aspiration	APM 16030.4	Filter	0.002
TRUE	TRUE	4990-0011-0029	Fiber Receiving General Aspiration	APM 16019.4	Filter	0.002
TRUE	TRUE	4990-0001-0029	Cooling Tower	APM 40072.10	Filter	0.002
FALSE	FALSE	4820-0003-0022	Ingredient Bin 601	MICROPUL 4B	Filter	0.002
FALSE	FALSE	4820-0003-0026	Ingredient Bin 602	MICROPUL 4B	Filter	0.002
FALSE	FALSE	4820-0003-0030	Ingredient Bin 603	MICROPUL 2 1/2 B	Filter	0.002
FALSE	FALSE	4820-0003-0034	Ingredient Bin 604	APM 15105.4	Filter	0.002
TRUE	TRUE	4820-0003-0018	Micro Ingredient Dump Aspiration	APM 15105.4	Filter	0.002
TRUE	TRUE	4820-0003-0004	Mixer General Aspiration	BUHLER 25S-6-30	Filter	0.002
TRUE	TRUE	4900-0001-0065	3/4 Hammermill	APM 16009.6	Filter	0.002
TRUE	TRUE	4900-0001-0006	#3 & #4 Expanders	APM 16009.6	Filter	0.002
TRUE	TRUE	4900-0005-0001	Reprocessing General Aspiration	CD 376RF10	Filter	0.002
TRUE	TRUE	4900-0001-0042	#5 Pulvocron	BUHLER 37-8-220	Filter	0.002
FALSE	TRUE	4900-0001-0046	5/6 Pulverizer AB Finished Product Surge Bin	MICROPUL 4B	Filter	0.002
FALSE	TRUE	4900-0002-0032	Pellet Bins	BUHLER 16S-6-30	Filter	0.002
TRUE	TRUE	4990-0006-0027	Viscosity Flour Receiver	APM 16022.8	Filter	0.002
TRUE	TRUE	4990-0011-0010	Conditioning Receiver/Soy Meal Grinding	APM 16014.8	Filter	0.002

FALSE	TRUE		4900-0005-0007	Grind Reject/Scrap Bin	MICROPUL 2 1/2B	Filter	0.002
FALSE	TRUE		4900-0005-0029	Bldg 112 Vacuum	HOFFMAN 36x96	Filter	0.001
TRUE	TRUE		4900-0001-0030	AB Grinder Surge Bin	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE		4900-0005-0006	N CD General Aspiration & #5 Expander	CD 484RF12	Filter	0.002
TRUE	TRUE		4820-0001-0093	Removed From Service and Repurposed as 4880-0048-0012	NA	NA	-
TRUE	TRUE	pending repurpose	4912-0002-0054	Hominy Bulk Truck Loadout Aspiration	DD 484RF12	Filter	0.002
TRUE	TRUE		4860-0018-0003	South Hominy Feed Bin General Aspiration	MICROPUL 1F2	Filter	0.002
TRUE	TRUE		4860-0022-0017	Secondary Clean Grinding	APM 15030.8	Filter	0.002
TRUE	TRUE		4860-0024-0003	Bran Dryer	CORONA 15	Cyclone	0.0454
TRUE	TRUE		4912-0006-0017	Track 16 Rail Loadout	WEIDENMAN LFT 2X7	Filter	0.002
TRUE	TRUE		4860-0017-0073	Germ Dust Aspiration	AERODYNE	Cyclone	0.02
TRUE	TRUE		4860-0023-0001	Feed Mill General Aspiration	APM 40120.8	Filter	0.002
TRUE	TRUE		4860-0017-0003	Germ Dryer	CORONA HV56	Cyclone	0.0454
TRUE	TRUE		4860-0017-0072	Removed From Service	NA	NA	-
TRUE	TRUE		4860-0019-0003	FTS Dryer Aspiration	CORONA HV60	Filter	0.0454
TRUE	TRUE		4860-0024-0037	Pet Bran Kice Lites Aspiration	MICROPUL 36S-6-30	Filter	0.002
TRUE	TRUE		4900-0001-0058	This equipment is part of the 4900-0001-0058 process emission unit. Not a separate emisison unit.	NA	NA	-
TRUE	TRUE		4900-0001-0058	This equipment is part of the 4900-0001-0058 process emission unit. Not a separate emisison unit.	NA	NA	-
TRUE	FALSE		4880-0048-0012	Pneumatic Lift Receiver for WG260 Transfer	BUHLER MGX-60	Cyclone	0.02
TRUE	TRUE		4900-0003-0011	PCM Hammermill	Kice VS64-8	Filter	0.0020
TRUE	TRUE		4900-0008-0027	USG Hammermill	Kice VS64-8	Filter	0.0020
TRUE	TRUE		4900-0008-0022	USG Secondary Extruder Transfer	Kice CHS26	Cyclone	0.0200
TRUE	TRUE	pending project	Not Yet Assigned	This Unit Does Not Yet Exist	Not Yet Assigned		-
TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-

TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE		4880-0034-0027	This equipmetn will become part of the 4880-0034-0027 process emission unit. Not a separate emisison unit.	Will not be controlled by the S 105 Carter-Day Filter		
TRUE	TRUE		4880-0034-0001	Will become part of the 4880-0034-0001 process emission unit group. Not a separate emisison unit.	Will not be controlled by the S 105 Carter-Day Filter		
		still in service	4880-0034-0035	South APM Binning	APM 41144.12	Filter	0.0020
			4880-0046-0017	Whole Grain Dryer	KICE HV-26	Cyclone	0.0300
			4880-0046-0028	Whole Grain Hammermill	MAC MSS16	Filter	0.0020
			4880-0046-0042	Whole Grain Aspiration	TD 124RF10		0.0020
			4900-0007-0020	USG Primary Extruder Transfer	Kice CHS26	Cyclone	0.0200
			4860-0018-0044	6th Floor Radar Pulsar	MICROPUL 100S-6-20	Filter	0.0020
		still in service	4750-0029-0015	Feed Mill Conveying General Aspiration	MICROPUL 100S-6-20	Filter	0.0020
		still in service	4750-0029-0027	Round Bin General Aspiration	APM 14072.6	Filter	0.0020
		still in service	4860-0017-0026	Bin 945 Germ Receiver	BUHLER 36S-6-30	Filter	0.0020
		still in service	4860-0018-0007	North Hominy Feed Grinding General Aspiration	MICROPUL 1F2	Filter	0.0020
FALSE	TRUE		4912-0008-0006	Bldg 201/202 Vacuum	HOFFMAN	Filter	0.0010
FALSE	TRUE		4912-0009-0005	Bldg 201/202 Vacuum	HOFFMAN	Filter	0.0010
TRUE	TRUE		4860-0018-0049	Hominy Feed Bins Aspiration	Donaldson 276RFW12	Filter	0.0020
TRUE	TRUE		4750-0029-0032	Hominy Binning	APM 40240.8	Filter	0.0020
TRUE	TRUE		4750-0029-0001	Hominy Grind General Aspiration	MICROPUL 100S-6-20	Filter	0.0020
TRUE	TRUE		4912-0004-0022	Hominy Truck Loadout	376RF8	Filter	0.0020
TRUE	TRUE		4912-0003-0011	Track 15 Bulk Rail Loadout	376RF8	Filter	0.0020
TRUE	TRUE		4750-0025-0015	Removed From Service	NA	NA	
TRUE	TRUE		4750-0025-0015	Removed From Service	NA	NA	
TRUE	TRUE		4750-0025-0015	Removed From Service	NA	NA	
TRUE	TRUE		4750-0029-0045	Hominy Screener General Aspiration	MICROPUL 100S-6-20	Filter	0.0020
			4912-0000-0000	Hominy Loadout Fugitive	Fugitive	Fugitive	
			4912-0000-0001	Grain Loadout Fugitive	Fugitive	Fugitive	
			4750-0025-0015	Removed From Service	NA	NA	
			4750-0025-0015	Removed From Service	NA	NA	

	4840-0004-0004	B&W 96.55 MMBtu/hr Natural Gas Boiler	NA	NA	
	4840-0006-0007	Clayton 27.90 MMBtu/hr Natural Gas Boiler	NA	NA	
		Removed From Service	NA	NA	
	4800-4861-0000	Two 193 HP Emergency Diesel Fire Pumps	NA	NA	

After Pending CCM260 Project

pending project	4912-0002-0054	CCM260 Process Aspiration	S 105 Carter-Day	filter	0.0020
reused as CCM260 filter	4912-0002-0054	Hominy Bulk Truck Loadout Aspiration	DD 484RF12	filter	0.002
removed	4880-0034-0035	South APM Binning	APM 41144.12	filter	0.0020
removed	4750-0029-0015	Feed Mill Conveying General Aspiration	MICROPUL 100S-6-20	filter	0.0020
removed	4750-0029-0027	Round Bin General Aspiration	APM 14072.6	filter	0.0020
removed	4860-0017-0026	Bin 945 Germ Receiver	BUHLER 36S-6-30	filter	0.0020
removed	4860-0018-0007	North Hominy Feed Grinding General Aspiration	MICROPUL 1F2	filter	0.0020

oading PM10 (gr/dscf)	Exhaust Flow (scfm)	Actual PM Max (lb/hr)	PM Max (tpy)	PM10 Max (lb/hr)	PM10 Max (tpy)	These are used to check the data for accuracy		PM Max (tpy)			
0.0015	18,500	0.32	1.39	0.24	1.04	18,500	TRUE	1.39	1.04	TRUE	TRUE
0.001	1,000	0.01	0.04	0.01	0.04	1,000	TRUE	0.04	0.04	TRUE	TRUE
0.0015	55,000	0.71	3.1	0.71	3.1	55,000	TRUE	3.10	3.1	TRUE	TRUE
0.0015	21,600	0.28	1.22	0.28	1.22	21,600	TRUE	1.22	1.22	TRUE	TRUE
0.001	700	0.01	0.03	0.01	0.03	700	TRUE	0.03	0.03	TRUE	TRUE
0.0015	1,900	0.03	0.14	0.02	0.11	1,900	TRUE	0.14	0.11	TRUE	TRUE
			3.01		3.01			3.01	3.01		
			8.93		**8.55**			**8.93**	**8.55**		
0.002	36,017	0.62	2.7	0.62	2.7	36,017	TRUE	2.70	2.7	TRUE	TRUE
0.0015	41,000	0.7	3.08	0.53	2.31	41,000	TRUE	3.08	2.31	TRUE	TRUE
0.0015	57,372	0.98	4.31	0.74	3.23	57,372	TRUE	4.31	3.23	TRUE	TRUE
0.0015	25,109	0.43	1.89	0.32	1.41	25,109	TRUE	1.89	1.41	TRUE	TRUE
			11.98		**9.65**			**11.98**	**9.65**		
0.0015	1,660	0.03	0.12	0.02	0.09	1,660	TRUE	0.12	0.09	TRUE	TRUE
0.0015	3,400	0.06	0.26	0.04	0.19	3,400	TRUE	0.26	0.19	TRUE	TRUE
0.0015	4,400	0.08	0.33	0.06	0.25	4,400	TRUE	0.33	0.25	TRUE	TRUE
0.0015	2,200	0.04	0.17	0.03	0.12	2,200	TRUE	0.17	0.12	TRUE	TRUE
0.0015	6,215	0.11	0.47	0.08	0.35	6,215	TRUE	0.47	0.35	TRUE	TRUE
0.0015	13,000	0.22	0.98	0.17	0.73	13,000	TRUE	0.98	0.73	TRUE	TRUE
0.0015	13,295	0.23	1	0.17	0.75	13,295	TRUE	1.00	0.75	TRUE	TRUE
0.0015	43,700	0.75	3.28	0.56	2.46	43,700	TRUE	3.28	2.46	TRUE	TRUE
0.0015	55,000	0.94	4.13	0.71	3.1	55,000	TRUE	4.13	3.1	TRUE	TRUE
0.001	1,500	0.01	0.06	0.01	0.06	1,500	TRUE	0.06	0.06	TRUE	TRUE
0.0015	36,000	0.62	2.7	0.46	2.03	36,000	TRUE	2.70	2.03	TRUE	TRUE
0.001	1,500	0.01	0.06	0.01	0.06	1,500	TRUE	0.06	0.06	TRUE	TRUE
0.0015	980	0.02	0.07	0.01	0.06	980	TRUE	0.07	0.06	TRUE	TRUE
-	-	-	-	-	-						
-	-	-	-	-	-						

0.0015	42,826	0.73	3.22	0.55	2.41	42,826	TRUE	3.22	2.41	TRUE	TRUE
0.0015	41,000	0.70	3.08	0.53	2.31	41,000	TRUE	3.08	2.31	TRUE	TRUE
0.0015	33,300	0.57	2.5	0.43	1.88	33,300	TRUE	2.50	1.88	TRUE	TRUE
0.0015	40,000	0.69	3.00	0.51	2.25	40,000	TRUE	3.00	2.25	TRUE	TRUE
0.0015	42,000	0.72	3.15	0.54	2.37	42,000	TRUE	3.15	2.37	TRUE	TRUE
0.0015	45,021	0.77	3.38	0.58	2.54	45,021	TRUE	3.38	2.54	TRUE	TRUE
0.0015	56,000	0.96	4.2	0.72	3.15	56,000	TRUE	4.20	3.15	TRUE	TRUE
0.001	825	0.01	0.03	0.01	0.03	825	TRUE	0.03	0.03	TRUE	TRUE
-	-	-	-	-	-						
-	-	-	-	-	-						
-	-	-	-	-	-						
0.0015	440	0.01	0.03	0.01	0.02	440	TRUE	0.03	0.02	TRUE	TRUE
-	-	-	-	-	-						
0.0015	900	0.02	0.07	0.01	0.05	900	TRUE	0.07	0.05	TRUE	TRUE
-	-	-	-	-	-						
-	-	-	-	-	-						
0.0015	380	0.01	0.03	0	0.02	380	TRUE	0.03	0.02	TRUE	TRUE
0.0015	380	0.01	0.03	0	0.02	380	TRUE	0.03	0.02	TRUE	TRUE
0.0015	380	0.01	0.03	0	0.02	380	TRUE	0.03	0.02	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE
0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE
0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE
0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE

0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	570	0.01	0.04	0.01	0.03	570	TRUE	0.04	0.03	TRUE	TRUE
0.0015	570	0.01	0.04	0.01	0.03	570	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	570	0.01	0.04	0.01	0.03	570	TRUE	0.04	0.03	TRUE	TRUE
0.0015	570	0.01	0.04	0.01	0.03	570	TRUE	0.04	0.03	TRUE	TRUE
0.0015	7,200	0.12	0.54	0.09	0.41	7,200	TRUE	0.54	0.41	TRUE	TRUE
0.0015	4,077	0.07	0.31	0.05	0.23	4,077	TRUE	0.31	0.23	TRUE	TRUE
0.0015	10,000	0.17	0.75	0.13	0.56	10,000	TRUE	0.75	0.56	TRUE	TRUE
0.0015	867	0.01	0.07	0.01	0.05	867	TRUE	0.07	0.05	TRUE	TRUE
0.0015	400	0.01	0.03	0.01	0.02	400	TRUE	0.03	0.02	TRUE	TRUE
0.0015	4,452	0.08	0.33	0.06	0.25	4,452	TRUE	0.33	0.25	TRUE	TRUE
0.0015	1,435	0.02	0.11	0.02	0.08	1,435	TRUE	0.11	0.08	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	14,000	0.24	1.05	0.18	0.79	14,000	TRUE	1.05	0.79	TRUE	TRUE
0.0015	700	0.01	0.05	0.01	0.04	700	TRUE	0.05	0.04	TRUE	TRUE
0.0015	780	0.01	0.06	0.01	0.04	780	TRUE	0.06	0.04	TRUE	TRUE
0.0015	1,100	0.02	0.08	0.01	0.06	1,100	TRUE	0.08	0.06	TRUE	TRUE
0.0015	1,100	0.02	0.08	0.01	0.06	1,100	TRUE	0.08	0.06	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	700	0.01	0.05	0.01	0.04	700	TRUE	0.05	0.04	TRUE	TRUE
0.0015	867	0.01	0.07	0.01	0.05	867	TRUE	0.07	0.05	TRUE	TRUE
0.0015	6,000	0.10	0.45	0.08	0.34	6,000	TRUE	0.45	0.34	TRUE	TRUE

0.0015	1,250	0.02	0.09	0.02	0.07	1,250	TRUE	0.09	0.07	TRUE	TRUE
0.0015	1,055	0.02	0.08	0.01	0.06	1,055	TRUE	0.08	0.06	TRUE	TRUE
0.0015	1,645	0.03	0.12	0.02	0.09	1,645	TRUE	0.12	0.09	TRUE	TRUE
0.0015	3,200	0.05	0.24	0.04	0.18	3,200	TRUE	0.24	0.18	TRUE	TRUE
0.0015	2,739	0.05	0.21	0.04	0.15	2,739	TRUE	0.21	0.15	TRUE	TRUE
0.0015	742	0.01	0.06	0.01	0.04	742	TRUE	0.06	0.04	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	648	0.01	0.05	0.01	0.04	648	TRUE	0.05	0.04	TRUE	TRUE
0.0015	2,241	0.04	0.17	0.03	0.13	2,241	TRUE	0.17	0.13	TRUE	TRUE
0.0015	1,232	0.02	0.09	0.02	0.07	1,232	TRUE	0.09	0.07	TRUE	TRUE
0.001	1,500	0.01	0.06	0.01	0.06	1,500	TRUE	0.06	0.06	TRUE	TRUE
0.0015	1,400	0.02	0.11	0.02	0.08	1,400	TRUE	0.11	0.08	TRUE	TRUE
0.0015	1,000	0.02	0.08	0.01	0.06	1,000	TRUE	0.08	0.06	TRUE	TRUE
0.0015	14,000	0.24	1.05	0.18	0.79	14,000	TRUE	1.05	0.79	TRUE	TRUE
0.0015	210	0.004	0.02	0.003	0.01	210	TRUE	0.02	0.01	TRUE	TRUE
0.0015	210	0.004	0.02	0.003	0.01	210	TRUE	0.02	0.01	TRUE	TRUE
0.0015	210	0.004	0.02	0.003	0.01	210	TRUE	0.02	0.01	TRUE	TRUE
0.0015	210	0.004	0.02	0.003	0.01	210	TRUE	0.02	0.01	TRUE	TRUE
0.0015	2,500	0.04	0.19	0.03	0.14	2,500	TRUE	0.19	0.14	TRUE	TRUE
0.0015	1,500	0.03	0.11	0.02	0.08	1,500	TRUE	0.11	0.08	TRUE	TRUE
0.0015	1,258	0.02	0.09	0.02	0.07	1,258	TRUE	0.09	0.07	TRUE	TRUE
0.0015	1,017	0.02	0.08	0.01	0.06	1,017	TRUE	0.08	0.06	TRUE	TRUE
0.0015	27,550	0.47	2.07	0.35	1.55	27,550	TRUE	2.07	1.55	TRUE	TRUE
0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE
0.0015	570	0.01	0.04	0.01	0.03	570	TRUE	0.04	0.03	TRUE	TRUE
0.0015	705	0.01	0.05	0.01	0.04	705	TRUE	0.05	0.04	TRUE	TRUE
0.0015	2,143	0.04	0.16	0.03	0.12	2,143	TRUE	0.16	0.12	TRUE	TRUE
0.0015	1,350	0.02	0.1	0.02	0.08	1,350	TRUE	0.10	0.08	TRUE	TRUE

0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.001	500	0	0.02	0	0.02	500	TRUE	0.02	0.02	TRUE	TRUE
0.0015	2,100	0.04	0.16	0.03	0.12	2,100	TRUE	0.16	0.12	TRUE	TRUE
0.0015	36,000	0.62	2.7	0.46	2.03	36,000	TRUE	2.70	2.03	TRUE	TRUE
-	-	-	-	-	-						
0.0015	37,000	0.63	2.78	0.48	2.08	37,000	TRUE	2.78	2.08	TRUE	TRUE
0.0015	15,000	0.26	1.13	0.19	0.84	15,000	TRUE	1.13	0.84	TRUE	TRUE
0.0015	2,000	0.03	0.15	0.03	0.11	2,000	TRUE	0.15	0.11	TRUE	TRUE
0.002	6,888	2.68	11.74	0.12	0.52	6,888	TRUE	11.74	0.52	TRUE	TRUE
0.0015	30,000	0.51	2.25	0.39	1.69	30,000	TRUE	2.25	1.69	TRUE	TRUE
0.02	7,400	1.27	5.56	1.27	5.56	7,400	TRUE	5.56	5.56	TRUE	TRUE
0.0015	16,000	0.27	1.2	0.21	0.9	16,000	TRUE	1.20	0.9	TRUE	TRUE
0.002	10,000	3.89	17.04	0.17	0.75	10,000	TRUE	17.04	0.75	TRUE	TRUE
-	-	-	-	-	-						
0.002	6,888	2.68	11.74	0.12	0.52	6,888	TRUE	11.74	0.52	TRUE	TRUE
0.0015	1,600	0.03	0.12	0.02	0.09	1,600	TRUE	0.12	0.09	TRUE	TRUE
-	-	-	-	-	-						
-	-	-	-	-	-						
0.02	682	0.12	0.51	0.12	0.51	682	TRUE	0.51	0.51	TRUE	TRUE
0.0020	6,500	0.11	0.49	0.11	0.49	6,500	TRUE	0.49	0.49	TRUE	TRUE
0.0020	6,500	0.11	0.49	0.11	0.49	6,500	TRUE	0.49	0.49	TRUE	TRUE
0.0200	4,000	0.69	3.00	0.69	3.00	4,000	TRUE	3.00	3.00	TRUE	TRUE
-	-	-	-	-	-						
-	-	-	-	-	-						
-	-	-	-	-	-						
-	-	-	-	-	-						
-	-	-	-	-	-						

-	-	-	-	-	-							
-	-	-	-	-	-							
0.0015	30,000	0.51	2.25	0.39	1.69		30,000	TRUE	2.25	1.69	TRUE	TRUE
0.0200	1,400	0.36	1.58	0.24	1.05		1,400	TRUE	1.58	1.05	TRUE	TRUE
0.0015	6,000	0.1	0.45	0.08	0.34		6,000	TRUE	0.45	0.34	TRUE	TRUE
0.0015	5,080	0.09	0.38	0.07	0.29		5,080	TRUE	0.38	0.29	TRUE	TRUE
0.0200	4,000	0.69	3.00	0.69	3.00		4,000	TRUE	3.00	3	TRUE	TRUE
0.0015	7,400	0.13	0.56	0.1	0.42		7,400	TRUE	0.56	0.42	TRUE	TRUE
0.0015	7,600	0.13	0.57	0.1	0.43		7,600	TRUE	0.57	0.43	TRUE	TRUE
0.0015	7,134	0.12	0.54	0.09	0.40		7,134	TRUE	0.54	0.4	TRUE	TRUE
0.0015	1,800	0.03	0.14	0.02	0.10		1,800	TRUE	0.14	0.1	TRUE	TRUE
0.0015	14,000	0.24	1.05	0.18	0.79		14,000	TRUE	1.05	0.79	TRUE	TRUE
			120.92		**65.20**				**120.92**	**65.20**		
0.0010	700	0.01	0.03	0.01	0.03		700	TRUE	0.03	0.03	TRUE	TRUE
0.0010	700	0.01	0.03	0.01	0.03		700	TRUE	0.03	0.03	TRUE	TRUE
0.0015	21,000	0.36	1.58	0.27	1.18		21,000	TRUE	1.58	1.18	TRUE	TRUE
			1.64		1.24				1.64	1.24		
0.0015	30,000	0.51	2.25	0.39	1.69		30,000	TRUE	2.25	1.69	TRUE	TRUE
0.0015	21,000	0.36	1.58	0.27	1.18		21,000	TRUE	1.58	1.18	TRUE	TRUE
0.0015	34,960	0.6	2.62	0.45	1.97		34,960	TRUE	2.62	1.97	TRUE	TRUE
0.0020	34,960	0.6	2.62	0.6	2.62		34,960	TRUE	2.62	2.62	TRUE	TRUE
0.0015	7,600	0.13	0.57	0.1	0.43		7,600	TRUE	0.57	0.43	TRUE	TRUE
			6.90		1.02				6.90	1.02		
			0.10		0.10				0.00	0.00		
			16.64		9.01				16.54	8.91		
			0.00		0.00							

			3.21		3.21
			0.93		0.93
			0.05		0.04
			4.19		4.18
			160.11		93.65
		Total PTE	**164.30**		**97.83**

0.0020	40,600	0.7	3.05	0.7	3.05
0.0015	-37,000	-0.63	-2.78	-0.48	-2.08
0.0015	-30,000	-0.51	-2.25	-0.39	-1.69
0.0015	-7,600	-0.13	-0.57	-0.1	-0.43
0.0015	-7,134	-0.12	-0.54	-0.09	-0.40
0.0015	-1,800	-0.03	-0.14	-0.02	-0.10
0.0015	-14,000	-0.24	-1.05	-0.18	-0.79

Post CCM260 Project

Total PTE	**160.02**	**95.39**

160.01	93.55
160.01	93.55

	Emisison Unit Number	PM Max (tpy)	PM10 Max (lb/hr)
Yes	5012-0000-0000	0	0
Yes	5012-0001-0016	0.32	0.24
Yes	5012-0002-0012	0.43	0.32
Yes			
Yes			
Yes			
	5012-0005-0021	0.62	0.62
	5012-0005-0029	0.71	0.71
Yes	5012-0007-0015	0.28	0.28
Yes			
Yes	5012-0010-0047	0.01	0.01
Yes	5012-0010-0054	0.01	0.01
		2.38	**2.19**
Yes	4870-0005-0003	0.01	0.01
Yes	4870-0006-0006	0.02	0.02
Yes	4870-0010-0005	0.02	0.02
Yes	4870-0010-0030	0.06	0.04
Yes	4870-0010-0055	0.03	0.02
Yes	4870-0013-0001	0.7	0.53
Yes	4870-0013-0015	0.03	0.02
Yes	4870-0013-0019	0.08	0.06
Yes	4870-0013-0024	0.72	0.54
Yes	4870-0015-0016	0.01	0.01
Yes	4870-0021-0001	0.62	0.46
Yes	4880-0032-0052	0.01	0.01
Yes	4880-0032-0070	0.01	0.01
	4880-0034-0001	0.94	0.71
	4880-0034-0010	0.73	0.55

Yes	4880-0034-0019	0.69	0.51
Yes	4880-0034-0027	0.75	0.56
Yes	4880-0034-0035	0.51	0.39
Yes	4880-0034-0042	0.7	0.53
Yes	4880-0034-0048	0.57	0.43
Yes	4880-0034-0054	0.22	0.17
Yes	4880-0034-0059	0.23	0.17
Yes	4880-0034-0069	0.98	0.74
	4880-0034-0071	0.96	0.72
	4880-0034-0077	0.77	0.58
	4880-0042-0054	0.02	0.01
Yes	4880-0042-0057	0.04	0.03
	4880-0042-0062	0.11	0.08
Yes	~~4880-0042-0081~~		
	4880-0044-0070	-	-
	4880-0044-0073	-	-
Yes	4880-0044-0076	-	-
Yes	4880-0046-0017	0.36	0.24
Yes	4880-0046-0028	0.1	0.08
Yes	4880-0046-0042	0.09	0.07
Yes	4880-0048-0012	0.12	0.12
Yes	4932-0001-0001	0.02	0.01
Yes		**1.63**	**8.45**
Yes			
Yes			
Yes			
Yes			
Yes			
Yes			

Yes

Yes

Yes

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Yes

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Yes

Yes

Yes

Yes

Actual Values that should be in the FESOP

Emission Unit Number	Source Name	Fugitive Filter Cyclone	Fugitive Filter Cyclone	Grain Loading PM (gr/dscf)	Grain Loading PM10 (gr/dscf)	Exhaust Flow (scfm)	Actual PM Max (lb/hr)	PM Max (tpy)	PM10 Max (lb/hr)	PM10 Max (tpy)
5012-0001-0016	Truck Dump #1	APM 40072 10	Filter	0.002	0.0015	18,500	0.32	1.39	0.24	1.04
5012-0010-0054	Hoffman Bldg 301 Vacuum	HOFFMAN 48X96	Filter	0.001	0.001	1,000	0.01	0.04	0.01	0.04
5012-0005-0029	West Headhouse General Aspiration	DO 484RF12	Filter	0.0015	0.0015	55,000	0.71	3.1	0.71	3.1
5012-0007-0015	Rail Dump Pit and Section D & E General Aspiration	376RF8	Filter	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
5012-0010-0047	Track 6 Vacuum	HOFFMAN 48X96	Filter	0.001	0.001	700	0.01	0.03	0.01	0.01
4870-0011-0015	Cleanings Discharge	BUHLER 165-6-30	Filter	0.002	0.0015	1,900	0.33	0.14	0.02	0.11
5012-0000-0000	Grain Receiving Fugitive	Fugitive	Fugitive					1.01		3.96
								8.93		8.55
5012-0005-0021	Truck Dump #4 w/ Gallery General Aspiration	DO 484RF12	Filter	0.002	0.002	36,017	0.61	2.7	0.62	2.7
4870-0013-0001	Cleaning North APM	APM 41216 12	Filter	0.002	0.0015	41,000	0.7	3.08	0.53	2.31
4880-0034-0069	Bldg 115 Corn Cleaning	ID 484RF12	Filter	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
5012-0002-0012	North Street Truck Dump #2	DO 484RF12	Filter	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
								11.98		9.65
4870-0010-0055	Bemes Bagging	APM 16019 8	Filter	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
4870-0010-0030	Bagging General Aspiration	APM 40020 8	Filter	0.002	0.0015	3,400	0.06	0.26	0.04	0.19
4870-0013-0019	Bagging Packer General Aspiration	APM 14042 8	Filter	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
4880-0042-0057	Bran Dryer Process	APM 14016 8	Filter	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
4880-0042-0062	Bran Sifter Process	APM 10144 8	Filter	0.002	0.0015	6,205	0.11	0.47	0.08	0.35
4880-0034-0054	East Meal Dryer/Cooler	APM 40129 10	Filter	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
4880-0034-0059	West Meal Dryer	APM 40144 8	Filter	0.002	0.0015	13,795	0.23	1	0.17	0.75
4880-0034-0027	Bldg 105/115 General Aspiration	DO 484RF12	Filter	0.002	0.0015	43,700	0.75	3.28	0.56	2.46
4880-0034-0001	Bldg 102/105 General Aspiration	MCF 144-756	Filter	0.002	0.0015	55,000	0.94	4.13	0.71	3.1
4880-0012-0052	Bldg 105 Vacuum	HOFFMAN 36x96	Filter	0.001	0.001	1,500	0.01	0.06	0.01	0.06
4870-0021-0001	Bulk Loading White Goods	DO 484RF12	Filter	0.002	0.0015	36,000	0.62	2.7	0.46	2.03
4870-0015-0016	Bldg 104 Vacuum	HOFFMAN 38405A	Filter	0.001	0.001	1,500	0.01	0.06	0.01	0.06
4880-0042-0054	Bran Bin	BUHLER 165-6-30	Filter	0.002	0.0015	980	0.02	0.07	0.01	0.06
4880-0008-0028	Removed From Service	NA	NA	-	-	-	-	-	-	-
4880-0008-0040	Removed From Service	NA	NA	-	-	-	-	-	-	-
4880-0034-0010	South Lunchroom Screening	CD 484RF12	Filter	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
4880-0034-0042	South CD Screening	CD 484RF12	Filter	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
4880-0034-0048	North CD General Aspiration	CD 484RF12	Filter	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
4880-0034-0019	North Lunchroom Screening	CD 484RF12	Filter	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
4870-0013-0024	Packaging and Bulk Loading Bldg 115	TD 484RF12	Filter	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
4880-0034-0077	Camas/Bran Bldg 115	TD 484RF12	Filter	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
4880-0034-0071	Thru/Tad Stack Dryers Bldg 115	TD 484RF12	Filter	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
4880-0012-0070	Bldg 115 Vacuum	HOFFMAN S54002	Filter	0.001	0.001	825	0.01	0.03	0.01	0.01
4880-0044-0070	Removed From Service	NA	NA	-	-	-	-	-	-	-
4880-0044-0073	Removed From Service	NA	NA	-	-	-	-	-	-	-
4880-0044-0076	Removed From Service	NA	NA	-	-	-	-	-	-	-
4870-0005-0003	Track 2 Railcar Unloading Secondary Receiver	USS-INC 15CF P/D	Filter	0.002	0.0015	440	0.01	0.03	0.01	0.02
4880-0009-0005	Removed From Service	NA	NA	-	-	-	-	-	-	-
4932-0001-0001	Lab Filter	APM 14106 4	Filter	0.007	0.0015	900	0.02	0.07	0.01	0.05
4900-0003-0039	Removed From Service	NA	NA	-	-	-	-	-	-	-
4900-0003-0045	Removed From Service	NA	NA	-	-	-	-	-	-	-
4990-0005-0012	1/2 Pulvocron Meal Receiver	BUHLER 9-6-100	Filter	0.001	0.0015	380	0.01	0.03	0	0.02
4990-0005-0042	1/2 Pulvocron Visc Flour Receiver	BUHLER 9-6-100	Filter	0.002	0.0015	380	0.01	0.03	0	0.02
4990-0002-0010	3/4 Pulvocron Meal Receiver	BUHLER 9-6-100	Filter	0.002	0.0015	380	0.01	0.03	0	0.02
4990-0004-0013	9/10 Pulvocron Meal Secondary Receiver	BUHLER 16009 4	Filter	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
4990-0003-0010	7/8 Pulvocron Meal Secondary Receiver	BUHLER 16009 4	Filter	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
4990-0002-0019	#3 Pulvocron	BUHLER 37-8-220	Filter	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
4990-0002-0022	#4 Pulvocron	BUHLER 37-8-220	Filter	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
4900-0001-0019	#5 Pulvocron	BUHLER 37-8-220	Filter	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
4990-0005-0021	#1 Pulvocron	BUHLER 37-8-220	Filter	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
4990-0005-0024	#2 Pulvocron	BUHLER 37-8-220	Filter	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
4990-0003-0019	#7 Pulvocron	APM 16022 8	Filter	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
4990-0003-0022	#7 Pulvocron	APM 16022 8	Filter	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
4990-0004-0022	#9 Pulvocron	APM 16022 8	Filter	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
4990-0004-0025	#10 Pulvocron	APM 16022 8	Filter	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
4990-0007-0008	1/4 Pulvocron Meal Bin	MICROPUL 2 1/2B	Filter	0.002	0.0015	500	0.01	0.04	0.01	0.03
4990-0005-0010	1/2 Pulvocron Meal Bin	MICROPUL 2 1/2B	Filter	0.002	0.0015	500	0.01	0.04	0.01	0.03
4990-0004-0011	9/10 Pulvocron Meal Bin	APM 16104 4	Filter	0.002	0.0015	570	0.01	0.04	0.01	0.03
4990-0003-0008	7/8 Pulvocron Meal Bin	APM 16104 4	Filter	0.002	0.0015	570	0.01	0.04	0.01	0.03
4990-0005-0028	1/2 Flour Surge Bin	MICROPUL 2 1/2B	Filter	0.002	0.0015	500	0.01	0.04	0.01	0.03
4990-0002-0026	1/4 Flour Surge Bin	MICROPUL 2 1/2B	Filter	0.002	0.0015	500	0.01	0.04	0.01	0.03
4990-0003-0026	7/8 Flour Surge Bin	APM 16104 4	Filter	0.002	0.0015	570	0.01	0.04	0.01	0.03
4990-0004-0029	9/10 Flour Surge Bin	APM 16104 4	Filter	0.002	0.0015	570	0.01	0.04	0.01	0.03
4990-0006-0024	Inboard Visc Flake Roller Mill	APM 15066 8	Filter	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
4820-0001-0029	CSM Blended Food Receiver	APM 40070 7	Filter	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
4820-0001-0052	Blended Food Packaging Aspiration	APM 16150 6	Filter	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
4900-0001-0068	Allbond Visc Flour General Aspiration	BUHLER 16-8-100	Filter	0.002	0.0015	867	0.01	0.07	0.01	0.05
4820-0003-0007	Milk Bins	MICROPUL 6B	Filter	0.002	0.0015	400	0.01	0.03	0.01	0.02
4990-0007-0049	300 Series Binning	MICROPUL 1F1	Filter	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
4990-0001-0002	Soy Meal General Aspiration	APM 16022 4	Filter	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
4990-0001-0006	Soy Meal Surge Bin	MICROPUL 6B	Filter	0.002	0.0015	500	0.01	0.04	0.01	0.03
4990-0001-0025	Meal Bin Cooler	APM 40072 10	Filter	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
4990-0002-0043	1/4 Soy Flour Receiver	APM 16014 8	Filter	0.002	0.0015	700	0.01	0.05	0.01	0.04
4820-0003-0072	Tri Cal Bins	APM 16009 8	Filter	0.002	0.0015	780	0.01	0.06	0.01	0.04
4900-0001-0058	5/6 Allbond Receiver	APM 16014 8	Filter	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
4990-0003-0032	7/8 Soy Flour Receiver	APM 16014 8	Filter	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
4990-0002-0031	Bin 308	MICROPUL 6B	Filter	0.002	0.0015	500	0.01	0.04	0.01	0.03
4990-0002-0036	Bin 309	MICROPUL 6B	Filter	0.002	0.0015	500	0.01	0.04	0.01	0.03
4820-0003-0038	Bin 310	MICROPUL 6B	Filter	0.002	0.0015	500	0.01	0.04	0.01	0.03
4820-0002-0068	Bin 508	MICROPUL 6B	Filter	0.002	0.0015	500	0.01	0.04	0.01	0.03
4820-0002-0072	Bin 509	MICROPUL 6B	Filter	0.002	0.0015	500	0.01	0.04	0.01	0.03
4990-0004-0037	9/10 Pulvocron Receiver	BUHLER 16-6-220	Filter	0.002	0.0015	700	0.01	0.05	0.01	0.04
4820-0002-0018	Milk Bins	MICROPUL 21-6-220	Filter	0.002	0.0015	867	0.01	0.07	0.01	0.05
4820-0002-0035	Milk Bin Bag Dump	APM 14048 6	Filter	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
4990-0007-0029	Blending Batch Bin General Aspiration	BUHLER 255-6-30	Filter	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
4990-0007-0016	Blending General Aspiration	BUHLER 165-6-30	Filter	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
4990-0007-0032	Blending General Aspiration	MICROPUL 36S-8-30	Filter	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
4820-0003-0063	CSB Binning General Aspiration	BUHLER 64S-6-30	Filter	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
4820-0003-0059	CSB Binning General Aspiration	BUHLER 64S-6-30	Filter	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
4990-0006-0040	Finished Product General Aspiration	BUHLER 9-8-220	Filter	0.002	0.0015	742	0.01	0.06	0.01	0.04
4900-0001-0091	#5 SI General Aspiration & #5 Expander	APM 14024 6	Filter	0.002	0.0015	3,000	0.05	0.23	0.04	0.17

	4990-0011-0001	Fiber Receiving General Aspiration	BUHLER 9-8-220	Filter	0 002	0 0015	648	0 01	0 05	0 01	0 04
	4820-0002-0011	PCM Binning	MICROPUL 1F1	Filter	0 002	0 0015	2,241	0 04	0 17	0 03	0 13
	4870-0010-0005	CF Bran Packing Binning	MICROPUL 25-8-220	Filter	0 002	0 0015	1,212	0 02	0 09	0 02	0 07
	4900-0005-0035	Bldg 111 Vacuum	HOFFMAN 60X120	Filter	0 001	0 001	1,500	0 01	0 06	0 01	0 05
	4870-0006-0006	110/210 Receiver General Aspiration	APM 16030 4	Filter	0 002	0 0015	1,400	0 02	0 11	0 02	0 08
	4990-0011-0029	Fiber Receiving General Aspiration	APM 18018 4	Filter	0 002	0 0015	1,000	0 02	0 08	0 01	0 06
	4990-0001-0029	Cooling Tower	APM 40072 10	Filter	0 002	0 0015	14,000	0 24	1 05	0 18	0 79
	4820-0001-0022	Ingredient Bin 601	MICROPUL 4B	Filter	0 007	0 0015	210	0 004	0 02	0 001	0 01
	4820-0001-0026	Ingredient Bin 602	MICROPUL 4B	Filter	0 007	0 0015	210	0 004	0 02	0 003	0 01
	4820-0001-0030	Ingredient Bin 603	MICROPUL 2 1/2 B	Filter	0 002	0 0015	210	0 004	0 02	0 003	0 01
	4820-0001-0034	Ingredient Bin 604	APM 15105 4	Filter	0 002	0 0015	210	0 004	0 02	0 003	0 01
	4820-0003-0018	Micro Ingredient Dump Aspiration	APM 15105 4	Filter	0 002	0 0015	2,500	0 04	0 19	0 03	0 14
	4820-0003-0004	Mixer General Aspiration	BUHLER 255-6-30	Filter	0 002	0 0015	1,500	0 03	0 13	0 02	0 08
	4900-0001-0065	3/4 Hammermill	APM 16009 6	Filter	0 002	0 0015	1,358	0 01	0 09	0 02	0 07
	4900-0001-0006	#3 & 04 Expanders	APM 16009 6	Filter	0 002	0 0015	1,017	0 02	0 08	0 01	0 06
	4900-0005-0001	Reprocessing General Aspiration	CD 376AF10	Filter	0 002	0 0015	27,550	0 47	2 07	0 35	1 55
	4900-0001-0042	#5 Pulvocron	BUHLER 17-8-220	Filter	0 002	0 0015	2,904	0 05	0 22	0 04	0 16
	4900-0001-0046	5/6 Pulverizer AB Finished Product Surge Bin	MICROPUL 4B	Filter	0 002	0 0015	570	0 01	0 04	0 01	0 03
	4900-0002-0032	Pellet Bins	BUHLER 165-6-30	Filter	0 002	0 0015	705	0 01	0 05	0 01	0 04
	4990-0006-0027	Viscosity Flour Receiver	APM 16022 8	Filter	0 002	0 0015	2,143	0 04	0 16	0 03	0 12
	4990-0011-0010	Conditioning Receiver/Soy Meal Grinding	APM 16014 8	Filter	0 002	0 0015	1,350	0 02	0 1	0 02	0 08
	4900-0005-0007	Grind Reject/Scrap Bin	MICROPUL 2 1/2B	Filter	0 002	0 0015	500	0 01	0 04	0 01	0 03
	4900-0005-0029	Bldg 112 Vacuum	HOFFMAN 36x96	Filter	0 001	0 001	500	0	0 02	0	0 02
	4900-0001-0030	AB Grinder Surge Bin	BUHLER 17-8-220	Filter	0 002	0 0015	2,100	0 04	0 16	0 03	0 12
	4900-0005-0006	N CD General Aspiration & #5 Expander	CD 484RF12	Filter	0 002	0 0015	36,000	0 62	2 7	0 46	2 03
	4820-0001-0093	Removed From Service and Repurposed as 4880-0048-0012	NA	NA	-	-	-	-	-	-	-
pending repurpose	4912-0002-0054	Hominy Bulk Truck loadout Aspiration	DO 484RF12	Filter	0 002	0 0015	17,000	0 61	2 78	0 48	2 08
	4860-0018-0003	South Hominy Feed Bin General Aspiration	MICROPUL 1F2	Filter	0 007	0 0015	15,000	0 26	1 18	0 19	0 84
	4860-0072-0017	Secondary Clean Grinding	APM 15030 8	Filter	0 002	0 0015	2,000	0 03	0 15	0 03	0 11
	4860-0074-0003	Bran Dryer	CORONA 15	Cyclone	0 0454	0 002	6,888	2 68	12 24	0 12	0 52
	4912-0006-0017	Track 16 Rail Loadout	WEIDENMAN LFT 2x7	Filter	0 002	0 0015	30,000	0 51	2 25	0 39	1 69
	4860-0017-0073	Germ Dust Aspiration	AERODYNE	Cyclone	0 02	0 02	7,400	1 27	5 56	1 27	5 56
	4860-0023-0001	Feed Mill General Aspiration	APM 40120 8	Filter	0 002	0 0015	16,000	0 27	1 2	0 21	0 9
	4860-0017-0003	Germ Dryer	CORONA HV56	Cyclone	0 0454	0 002	10,000	3 89	17 04	0 17	0 75
	4860-0017-0072	Removed From Service	NA	NA	-	-					
	4860-0019-0003	FTS Dryer Aspiration	CORONA HV60	Filter	0 0454	0 002	6,888	2 68	12 24	0 12	0 52
	4860-0024-0017	Pet Bran Rice Lites Aspiration	MICROPUL 365-6-30	Filter	0 002	0 0015	1,600	0 03	0 12	0 02	0 09
	4900-0001-0058	This equipment is part of the 4900-0001-0058 process emission unit Not a separate emission unit	NA	NA	-	-	-	-	-	-	-
	4900-0001-0058	This equipment is part of the 4900-0001-0058 process emission unit Not a separate emission unit.	NA	NA	-	-	-	-	-	-	-
	4880-0048-0012	Pneumatic Lift Receiver for WG260 Transfer	BUHLER MGX-60	Cyclone	0 02	0 02	682	0 12	0 51	0 12	0 51
	4900-0003-0011	PCM Hammermill	Rice V564-8	Filter	0 0020	0 0020	6,500	0 11	0 49	0 11	0 49
	4900-0008-0027	USG Hammermill	Rice V564-8	Filter	0 0020	0 0020	6,500	0 11	0 49	0 11	0 49
	4900-0008-0022	USG Secondary Extruder Transfer	Rice CH526	Cyclone	0 0200	0 0200	4,000	0 69	3 00	0 69	3 00
pending project	Not Yet Assigned	This Unit Does Not Yet Exist	Not Yet Assigned		-	-	-	-	-	-	-
pending project	Same as above	Same as above	Same as above		-	-	-	-	-	-	-
pending project	Same as above	Same as above	Same as above		-	-	-	-	-	-	-
pending project	Same as above	Same as above	Same as above		-	-	-	-	-	-	-
pending project	Same as above	Same as above	Same as above		-	-	-	-	-	-	-
pending project	Same as above	Same as above	Same as above		-	-	-	-	-	-	-
pending project	Same as above	Same as above	Same as above		-	-	-	-	-	-	-
	4880-0034-0027	This equipment will become part of the 4880-0034-0027 process emission unit Not a separate emission unit	Will not be controlled by the S 105 Carter-Day Filter								
	4880-0034-0001	Will become part of the 4880-0034-0001 process emission unit group Not a separate emission unit	Will not be controlled by the S 105 Carter-Day Filter								
still in service	4880-0034-0035	South APM Binning	APM 41144 12	Filter	0 0020	0 0015	30,000	0 51	2 25	0 39	1 69
	4880-0046-0017	Whole Grain Dryer	RICE HV-26	Cyclone	0 0300	0 0200	1,400	0 36	1 58	0 24	1 05
	4880-0046-0028	Whole Grain Hammermill	MAC MSS16	Filter	0 0020	0 0015	6,000	0 1	0 45	0 08	0 34
	4880-0046-0042	Whole Grain Aspiration	TD 124AF10		0 0020	0 0015	5,080	0 09	0 38	0 07	0 29
	4900-0007-0020	USG Primary Extruder Transfer	Rice CH526	Cyclone	0 0200	0 0200	4,000	0 69	3 00	0 69	3 00
	4860-0018-0044	6th Floor Radar Pulsar	MICROPUL 1005-6-20	Filter	0 0020	0 0015	7,400	0 13	0 56	0 1	0 42
still in service	4750-0029-0015	Feed Mill Conveying General Aspiration	MICROPUL 1005-6-20	Filter	0 0020	0 0015	7,600	0 13	0 57	0 1	0 43
still in service	4750-0029-0027	Round Bin General Aspiration	APM 14072 6	Filter	0 0020	0 0015	2,134	0 12	0 54	0 09	0 40
still in service	4860-0017-0026	Bin 945 Germ Receiver	BUHLER 365-6-30	Filter	0 0020	0 0015	1,800	0 03	0 14	0 02	0 10
still in service	4860-0018-0007	North Hominy Feed Grinding General Aspiration	MICROPUL 1F2	Filter	0 0020	0 0015	14,000	0 24	1 05	0 18	0 79
									120.92		69.20
	4912-0008-0006	Bldg 201/202 Vacuum	HOFFMAN	Filter	0 0010	0 0010	700	0 01	0 03	0 01	0 03
	4912-0009-0005	Bldg 201/202 Vacuum	HOFFMAN	Filter	0 0010	0 0010	700	0 01	0 03	0 01	0 03
	4860-0018-0049	Hominy Feed Bins Aspiration	Donaldson 276AFW12	Filter	0 0070	0 0015	21,000	0 36	1 58	0 27	1 18
									1 64		1 24
	4750-0029-0032	Hominy Binning	APM 40240 8	Filter	0 0020	0 0015	30,000	0 51	2 25	0 39	1 69
	4750-0029-0001	Hominy Grind General Aspiration	MICROPUL 1005-6-20	Filter	0 0020	0 0015	21,000	0 36	1 58	0 27	1 18
	4912-0004-0022	Hominy Truck Loadout	376AF8	Filter	0 0020	0 0015	34,960	0 6	2 62	0 45	1 97
	4912-0001-0011	Track 15 Bulk Rail Loadout	376AF8	Filter	0 0020	0 0020	34,960	0 6	2 62	0 6	2 62
	4750-0025-0015	Removed From Service	NA	NA							
	4750-0025-0015	Removed From Service	NA	NA							
	4750-0025-0015	Removed From Service	NA	NA							
	4750-0029-0045	Hominy Screener General Aspiration	MICROPUL 1005-6-20	Filter	0 0020	0 0015	7,600	0 13	0 57	0 1	0 43
	4912-0000-0000	Hominy Loadout Fugitive	Fugitive	Fugitive					6 90		1 82
	4912-0000-0001	Grain Loadout Fugitive	Fugitive	Fugitive					0 10		0 10
									16 64		9 01
	4750-0025-0015	Removed From Service	NA	NA							
	4750-0025-0015	Removed From Service	NA	NA							
									0 00		0 00

	4840-0004-0004	B&W 96 55 MMBtu/hr Natural Gas Boiler	NA	NA				1 21		1 21
	4840-0005-0007	Clayton 27 90 MMBtu/hr Natural Gas Boiler	NA	NA				0 93		0 93
		Removed From Service	NA	NA						
	4800-4861-0000	Two 193 HP Emergency Diesel Fire Pumps	NA	NA				0 05		0 04
								4 19		4 18
								160 13		93 65
							Total PTE	164.30		97.83
After Pending CCM260 Project											
pending project	4912-0002-0054	CCM260 Process Aspiration	S 105 Carter-Day	filter	0 0020	0 0020	40,600	0 7	1 05	0 7	1 05
reused as CCM260 filter	4912-0002-0054	Hornsby Bulk Truck Loadout Aspiration	DD 484RF12	filter	0 002	0 0015	37,000	-0 63	-2 78	-0 48	-2 06
removed	4880-0034-0035	South APM Banning	APM 41344 12	filter	0 0020	0 0015	30,000	-0 1	-2 25	-0 39	-1 69
removed	4750-0029-0015	Feed Mill Conveying General Aspiration	MICROPUL 1005-6-20	filter	0 0020	0 0015	7,600	-0 1	-0 57	-0 1	-0 43
removed	4750-0029-0027	Round Bin General Aspiration	APM 14072 6	filter	0 0020	0 0015	7,134	-0 12	-0 54	-0 09	-0 40
removed	4860-0017-0026	Bin 945 Germ Receiver	BUHLER 365-6-30	filter	0 0020	0 0015	1,800	-0 03	-0 14	-0 02	-0 10
removed	4860-0018-0007	North Hornsby Feed Grinding General Aspiration	MICROPUL 1F2	filter	0 0020	0 0015	14,000	-0 24	1 05	-0 18	-0 79
							Post CCM260 Project				
							Total PTE	160.02		95.39	

Kras, Kim

From: Barria, German
Sent: Wednesday, July 27, 2022 1:01 PM
To: Bernoteit, Bob; Marr, Bill
Subject: FW: Waiver - Const.docx
Attachments: 96020027 - Bunge North America Inc - FESOP - 07-05-2022 - Bunge Comments.docx; Danville - FESOP Emission Limits Documentation.docx; FESOP - Emission Unit Comparison FESOP to Actual - July 24, 2022 jb.xlsx

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Wednesday, July 27, 2022 12:37 PM
To: Barria, German <German.Barria@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German, please find attached Bunge's comments on the draft FESOP as well as a spreadsheet with our review and comments on appropriate emissions limits for facility sources and emission limit justification information. In addition to our comments included in the word document, please see the following comments:

- Bunge requests that the FESOP indicate that the conditions and limits in the FESOP (once issued) supersede conditions and limits in all previous construction and operating permits.
- The facility is a minor source of hazardous air pollutants
- The two plant boilers are capable of only burning natural gas. They were originally permitted to burn fuel oil and propane as backup but are not longer capable of burning those fuels.
- The proposed emissions limits for the boilers are based on a heat content higher than 1000 Btu/scf. Bunge suggests the limits should be based on a heat content of 1000 Btu/scf
- Remove references to specific filter/cyclone devices in the emission unit description. Replacement of filters/cyclones is exempt from permitted under 201.146(hhh). Would not want a new filter/cyclone to not match what is listed in the permit.
- Bunge's proposed emission limits are based on grain loading factors that are achievable and can be demonstrated. The justification for the grain loading values used to calculate "FESOP PTE" is included on the attached document "Grain Loading Emission Limit Documentation".
- A comparison of emission unit information and emission limit information in the draft and Bunge's proposed descriptions and limits is attached. A couple of things to note
    - Bunge left this in excel form for each of copying and pasting
    - Columns B-I contain information from the FESOP draft.
    - Columns J, K, and Y-AE were for Bunge's internal comparison purposes

  - Bunge believes that the following information should be used to replace the information in the current draft
    - Columns M, N, P, Q, R, S, T-W
- Bunge strongly requests that IEPA remove the requirement to stack test all of the processing sources at the location within 90 days of permit issuance. This facility has roughly 135 sources that IEPA is proposing to require stack testing within 90 days of permit issuance and then again every 5 years. This is an incredibly onerous requirement and in many cases is not feasible.
  - Bunge is proposing emission limits that are based on reasonable grain loading rates from filters and cyclones.
  - These limits are achievable by well operated and maintained equipment.
  - Many of the sources are in areas that can not accommodate stack testing equipment
  - Many of the sources are not intended to operate in a manner that accommodates stack testing
    - Filter that only operate for a short time during material conveying
    - Bin vent filters

Sincerely,

Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 20, 2022 3:22 PM
To: James Burris <James.Burris@bunge.com>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Waiver - Const.docx

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Hello Jim,

I was told that we will need another waiver, the first of August is coming quick, and although we can put the requirement for a fugitive dust plan in the FESOP of within 90 days of issuance of the FESOP,
We still need comments on the draft permit, or a statement that indicates that it is ok to move forward with the draft as is. It is my understanding that there was an inspection recently, we will need to wait for the field inspection report.
I will say another waiver until September 1, hopefully we can moved the permits sometime during the month of august though.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Thursday, July 7, 2022 7:47 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German,

Attached is a pdf copy of the signed 90-day waiver letter. It is also being sent via registered mail.

Let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, July 5, 2022 1:57 PM
To: James Burris <James.Burris@bunge.com>
Subject: FW: Waiver - Const.docx

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I resending you the template waiver letter.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: Barria, German
Sent: Wednesday, June 22, 2022 2:41 PM
To: James Burris <James.Burris@bunge.com>
Subject: Waiver - Const.docx

Attached is what we will ask a waiver of the 90-days

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

~~Bunge North America, Inc.~~Bunge Milling, Inc.
Attn: ~~Dean Hughes~~Paul Catterson
~~11720 Borman Drive~~ 321 East North Street
~~St. Louis, Missouri 63146-1000~~ Danville, IL 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

4302 N. Main Street, Rockford, IL 61103 (815) 987-7760
595 S. State Street, Elgin, IL 60123 (847) 608-3131
2125 S. First Street, Champaign, IL 61820 (217) 278-5800
2009 Mall Street Collinsville, IL 62234 (618) 346-5120
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022
2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200
100 W. Randolph Street, Suite 4-500, Chicago, IL 60601

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Dry Corn Milling, Processing and Products Handling:

Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Gravity Tables #3 (4880-0044-0070), #4 (4880-0044-0073), and #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;

AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;

3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;

Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter);
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);

One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;
LTMS Truck/Rail Dump Pit (4750-0033-0000A);
LTMS Truck Loadout (4750-0033-0000B);

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);
~~One (1) 2,168 engine Hp-Diesel-Powered Emergency Generator Set (DG-100); and~~
Two (2) 193 Hp Diesel Fire-Pump Engines (insignificant)

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

b. Pursuant to 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

c. Pursuant to 40 CFR 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 mmBtu/hour), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

d. Pursuant to 40 CFR 60.42c(i), the SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction.

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.

Commented [MB1]: NSPS DD doesn't include "products". Not sure it is important to note that here so long as DD isn't identified as being applicable to facilities that are handling products other than listed grains

300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. Emergency Generator Set DG-100 is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

b. Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15,

2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

c. Pursuant to 40 CFR 63.6603(a), if you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6600 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The

management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

5a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, Clayton Boiler, and Emergency Generator Set DG-100 are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart E (Particulate Matter Emissions From Fuel Combustion Emission Units). Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

Commented [MB2]: Boilers only burn natural gas. This citation is for fuel combustion emissions sources that burn liquid fuel exclusively

d. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

e. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the

atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

f. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

g. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

h. When processing and handling processed materials, the emission units constructed before after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

i. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

j. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

k. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

1. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of

750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

6a. ~~Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 214 Subpart B (New Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 214.122(b)(2), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:~~

~~The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm;~~

Commented [MB3]: Boilers only burn natural gas

~~b. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.~~

Commented [MB4]: This source is no longer in service

~~c. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:~~

~~The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;~~

~~7. Emergency Generator Set DG-100 is subject to 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K shall apply only to photochemically reactive material.~~

8 Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

9a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. ~~This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.~~

Commented [MB5]: Facility does not manufacture prepared feeds

10a. ~~Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on site wind speed instrument measurements.~~

Commented [MB6]: Facility is not located in an area subject to 212.302

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

11. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

12a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

13a. Pursuant to 40 CFR 63.6595(c), if you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR Part 63, Subpart A.

b. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

c. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

d. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation

and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

An existing emergency or black start stationary RICE located at an area source of HAP emissions;

f. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

g. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

h. Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and

the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

i. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.

Table 6 to Subpart ZZZZ of Part 63– Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

j. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary RICE in emergency situations.

ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is power provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

k. Pursuant to 40 CFR 63.6665, Table 8 to 40 CFR 63 Subpart ZZZZ (see Attachment B) shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

l. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:

i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).

iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).

14a. Pursuant to 40 CFR 1090.305(a), except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305.

b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.

c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:

i. Minimum cetane index of 40.

ii. Maximum aromatic content of 35 volume percent.

15a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

16a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas ~~or distillate fuel oil (Grades No. 1 and 2) as the fuel.~~ The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. ~~Emergency Generator Set DG-100 shall only be operated with distillate fuel oil (Grades No. 1 and 2) as the fuel. The use of any other fuel in Emergency Generator Set DG-100 may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.~~

h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

j. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility

Commented [MB7]: Is this a typo? Not sure this condition belongs in the permit.

property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 16(m).

k. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

l. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

m. The emission units described in Conditions 16(j), (k), and (l) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

n. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

   vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

o. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated

under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 16(m) and (n).

p. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 16(m) and (n) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

17a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #1	0.0017	18,500	0.30	1.20
Hoffman Bldg 301 Vacuum	0.0017	1,000	0.02	0.10
West Headhouse Transfer General Aspiration	0.0017	55,000	0.78	3.40
Railcar Dump Pit	0.0017	27,000	0.39	1.70
Track 6 Vacuum	0.0017	700	0.01	0.04
Cleanings Discharge	0.0006	1,900	0.01	0.04
Grain Receiving Fugitives				5.40
			Total:	11.88

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.0017	36,017	0.52	2.30
Cleaning North APM	0.00085	41,000	0.30	1.31
Corn Cleaning Bldg 115 #2	0.00085	57,372	0.42	1.83
North St Grain/Meal Truck Dump Pit #2	0.0017	20,000	0.29	1.28
			Total:	6.71

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bemis Bagging	0.0006	1,660	0.01	0.04
Bagging General Aspiration	0.0006	3,400	0.02	0.08
Bagging Packer General Aspiration	0.0006	4,400	0.02	0.10
Bran Dryer Process	0.0006	2,800	0.01	0.06
Bran Sifter Process	0.0006	8,230	0.04	0.19
East Meal Dryer/Cooler	0.0006	13,000	0.07	0.29
West Meal Dryer	0.0006	13,295	0.07	0.30
8th FR DRACCO Screening	0.0006	42,000	0.22	0.95
9th FR DRACCO Screening	0.0006	69,500	0.36	1.57
Bldg 105 Vacuum	0.0006	1,500	0.01	0.03
Bulk Loading White Goods	0.0006	36,000	0.19	0.81
Bldg 104 Vacuum	0.0006	1,500	0.01	0.03
Bran Bin	0.0006	1,960	0.01	0.04
6th Flr Screening	0.0006	10,000	0.05	0.23
West 4th Floor Gravity Table:	0.0006	10,000	0.05	0.23
South Lunchroom Screening	0.0006	42,000	0.22	0.95
South CD Screening	0.0006	37,500	0.19	0.84
North CD General Aspiration	0.0006	30,000	0.15	0.68
North Lunchroom Screening	0.0006	36,000	0.19	0.81
Pack & Bulk Loading Bldg 115	0.0006	42,000	0.22	0.95
CAMAS/Bran Bldg 115	0.0006	45,021	0.23	1.01
Thru/Tail Stock Dryers Bldg 115	0.0006	56,000	0.29	1.26
Bldg 115 Vacuum	0.0006	825	0.01	0.02
Gravity Table #3	0.0006	6,200	0.03	0.14
Gravity Table #4	0.0006	6,200	0.03	0.14
Gravity Table #5	0.0006	6,200	0.03	0.14

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Track 2 Railcar Unloading Secondary Receiver	0.0006	440	0.01	0.01
Lab Filter	0.0006	900	0.01	0.02
AB Fin Product Surge Bin North	0.0006	742	0.01	0.02
AB Fin Product Surge Bin South	0.0006	742	0.01	0.02
1/2 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
1/2 Pulvocron Visc Flour Receiver	0.0006	380	0.01	0.01
3/4 Pulvocron Meal Receiver	0.0006	380	0.01	0.01
9/10 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
7/8 Pulvocron Meal Secondary Receiver	0.0006	3,000	0.02	0.07
#3 Pulvocron	0.0006	2,904	0.01	0.07
#4 Pulvocron	0.0006	2,904	0.01	0.07
#5 Pulvocron	0.0006	2,904	0.01	0.07
#1 Pulvocron	0.0006	2,904	0.01	0.07
#2 Pulvocron	0.0006	2,904	0.01	0.07
#7 Pulvocron	0.0006	3,000	0.02	0.07
#8 Pulvocron	0.0006	3,000	0.02	0.07
#9 Pulvocron	0.0006	3,000	0.02	0.07
#10 Pulvocron	0.0006	3,000	0.02	0.07
3/4 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
9/10 Pulvocron Grinder Surge Bin	0.0006	570	0.01	0.01
7/8 Pulvocron Grinder Surge Bin	0.0006	500	0.01	0.01
1/2 Flour Surge Bin	0.0006	500	0.01	0.01
3/4 Flour Surge Bin	0.0006	500	0.01	0.01
7/8 Flour Surge Bin	0.0006	570	0.01	0.01
9/10 Flour Surge Bin	0.0006	570	0.01	0.01
HIBOND Visc. Flake Roller Mill	0.0006	7,200	0.04	0.16
CSM Blended Food Receiver	0.0006	4,077	0.02	0.09
Blended Food Packaging	0.0006	10,000	0.05	0.23
ALLBOND Visc. Flour General Aspiration	0.0006	867	0.01	0.02
Milk Bins	0.0006	400	0.01	0.01
300 Series Binning	0.0006	4,452	0.02	0.10
Soy Meal General Aspiration	0.0006	1,435	0.01	0.03
Soy Meal Surge Bin	0.0006	500	0.01	0.01
Meal Bin Cooler	0.0006	9,158	0.05	0.21
3/4 Soy Flour Receiver	0.0006	700	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Tri Cal Bins	0.0006	780	0.01	0.02
5/6 Allond Receiver	0.0006	1,100	0.01	0.02
7/8 Soy Flour Receiver	0.0006	1,100	0.01	0.02
Bin 308	0.0006	500	0.01	0.01
Bin 509	0.0006	509	0.01	0.01
Bin 508	0.0006	500	0.01	0.01
Bin 310	0.0006	500	0.01	0.01
Bin 309	0.0006	500	0.01	0.01
9/10 Pulvicron Receiver	0.0006	700	0.01	0.02
Milk Bins	0.0006	807	0.01	0.02
Milk Bin Bag Dump	0.0006	6,000	0.03	0.14
Blending Batch Bin General Aspiration	0.0006	1,250	0.01	0.03
Blender General Aspiration (4990-0007-0036)	0.0006	1,055	0.01	0.02
Blender General Aspiration (4990-0007-0032)	0.0006	1,645	0.01	0.04
CSB Binning General Aspiration (4820-0003-0063)	0.0006	3,200	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059)	0.0006	2,739	0.01	0.06
General Aspiration	0.0006	742	0.01	0.02
#5 SL General Aspiration & #5 Expander	0.0006	3,000	0.02	0.07
Fiber Receiver General Aspiration	0.0006	648	0.01	0.01
PCM Binning	0.0006	2,241	0.01	0.05
CF Bran Packing Binning	0.0006	1,232	0.01	0.03
Bldg 111 Vacuum	0.0006	1,500	0.01	0.03
110/210 Receiver General Aspiration	0.0006	1,400	0.01	0.03
Fiber Receiver General Aspiration	0.0006	1,000	0.01	0.02
Cooling Tower	0.0006	14,000	0.07	0.32
Ingredient Bin 601	0.0006	210	0.01	0.01
Ingredient Bin 602	0.0006	210	0.01	0.01
Ingredient Bin 603	0.0006	210	0.01	0.01
Ingredient Bin 604	0.0006	210	0.01	0.01
Micro Ingredient Dump Filter	0.0006	2,500	0.01	0.06
Mixer General Aspiration	0.0006	1,500	0.01	0.03
3/4 Hammermill	0.0006	1,258	0.01	0.03
#3 & #4 Expanders	0.0006	1,017	0.01	0.02
Reprocess General Cooler Dryer Roof	0.0006	27,550	0.14	0.62
#6 Pulverizer Grinder	0.0006	2,904	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin	0.0006	570	0.01	0.01
Pellet Bins	0.0006	705	0.01	0.02

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Viscosity Flour Receiver	0.0006	2,143	0.01	0.05
Conditioning Receiver/Soy Meal Grinder	0.0006	1,350	0.01	0.03
Grind Reject/Scrap Bin	0.0006	500	0.01	0.01
Bldg 112 Vacuum	0.0006	500	0.01	0.01
AB Grinder Surge Bin	0.0006	2,100	0.01	0.05
N DAY General Aspiration & #5 Expander	0.0006	36,000	0.19	0.81
Blended Foods Filter	0.0006	5,080	0.03	0.11
Hominy Truck Loadout Aspiration	0.0006	37,000	0.19	0.83
South Hominy Feed	0.0006	15,000	0.08	0.34
Secondary Clean Grinding	0.0006	2,000	0.01	0.05
Bran Dryer	0.0006	6,888	0.04	0.16
Track 16 Bulk Rail Loadout	0.0006	30,000	0.15	0.68
Flaking General Aspiration	0.0006	16,000	0.08	0.36
Germ Dusters Aspiration	0.0006	7,400	0.04	0.17
Germ Dryer	0.0006	10,000	0.05	0.23
Germ Rolls Aspiration	0.0006	5,000	0.03	0.11
Fts Dryer Aspiration	0.0006	6,888	0.04	0.16
Pet Bran Kice Lites Filter	0.0006	1,600	0.01	0.04
Extrusion Receiver	0.0200	4,000	0.69	3.00
108 A-Bin Receiver	0.0200	500	0.09	0.38
Whole Grain Pneumatic Product Transfer Receiver	0.0200	682	0.12	0.53
PCM Hammermill	0.0020	7,200	0.12	0.54
USG Hammermill	0.0020	7,200	0.12	0.54
USG Extruder Transfer Collection Cyclone	0.0200	4,000	0.69	3.00
S 105 Roof Carter-Day Filter	0.0020	40,600	0.70	3.05
			Total:	30.85

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0006	700	0.01	0.02
Bldg 208 Vacuum	0.0006	700	0.01	0.02
Hominy Feed Bins Aspiration	0.0006	21,000	0.11	0.47
			Total:	0.50

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM & PM_{10} (lbs/Hour)	(Tons/Yr)
Hominy Binning	0.0006	30,000	0.15	0.68
Hominy Grinder General Aspiration	0.0006	21,000	0.11	0.47
Truck Hominy Loadout	0.0006	34,960	0.18	0.79
Rail Hominy/Grain Loadout #1	0.0006	34,960	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer	0.0006	20,000	0.10	0.45
LTMS & Rail Meal/Grain Loadout	0.0006	34,600	0.18	0.78
Flour Pellet Cooler	0.0055	8,000	0.38	1.65
Hominy Screener General Aspiration	0.0006	7,600	0.04	0.17
Hominy Loadout Fugitives				1.90
Grain Loadout Fugitives				0.10
			Total:	7.78

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

ii. LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	Throughput (T/Mo)	(T/Yr)	EMISSIONS PM (lb/T)	(T/Mo)	(T/Yr)	PM_{10} (lb/T)	(T/Mo)	(T/Yr)
LTMS Truck/Rail Dump Pit	12,500	75,000	0.035	0.02	0.13	0.0078	0.00	0.03
LTMS Truck Loadout	12,500	75,000	0.086	0.27	1.61	0.029	0.09	0.54
				Total:	1.74			0.57

These limits are based on the maximum throughput, standard AP-42 emission factors (Table 9.9-1, AP-42, Fifth Edition, Volume I, Update May 2003), 90% control efficiency for baghouse controlled for truck/rail dump pits, and 50% capture efficiency for loadout enclosure.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 82.274 mmscf/month, 822.741 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	(lbs/mmscf)	Emissions (Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.46	34.56
Nitrogen Oxides (NO_x)	50.0	2.06	20.57
Particulate Matter (PM)	7.6	0.31	3.13
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	(lbs/10^3 Gal)	Emissions (Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 23.771 mmscf/month, 237.712 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.00	9.98
Nitrogen Oxides (NO_x)	100.0	1.19	11.89
Particulate Matter (PM)	7.6	0.09	0.90
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.65

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

iii. Fuel Oil Usage: 141,667 gallons/month, 850,000 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emissions (lbs/10^3 Gal)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.35	2.13
Nitrogen Oxides (NO_x)	20.00	1.42	8.50
Particulate Matter (PM)	3.30	0.23	1.40
Sulfur Dioxide (SO_2)	0.213	0.02	0.09
Volatile Organic Material (VOM)	0.20	0.01	0.09

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 15 ppm, and standard emission factors (Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

h. Emissions from and operation of Emergency Generator Set DG-100 shall not exceed the following limits:

i. Hours of Operation: 100 hours/year;

ii. Emissions from the combustion of fuel oil in the Generator Sets:

Pollutant	Emission Factor (lb/hp hr)	Emissions (lbs/Hr)	(Tons/Year)
Carbon Monoxide (CO)	0.0055	11.92	0.60
Nitrogen Oxides (NO_x)	0.024	52.03	2.60
Particulate Matter (PM)	0.0007	1.52	0.08
Sulfur Dioxide (SO_2)	0.0000121	0.03	0.01
Volatile Organic Material (VOM)	0.000642	1.39	0.07

These limits are based on the rated output of the engine powering the generator set (2,168 engine hp), 100 hours/year of operation, standard emission factors (Table 3.4-1, AP-42, Fifth Edition,

Volume 1, Supplement B, October 1996), and a sulfur content of 15 ppm.

Commented [MB8]: See attached spreadsheet with appropriate emission limits

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

17. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

18a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and

malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

   i. Sampling ports adequate for test methods applicable to such facility. This includes:

      A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

      B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

   ii. Safe sampling platform(s).

   iii. Safe access to sampling platform(s).

   iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or

USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

19a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

20a. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

b. Pursuant to 40 CFR 60.44c(h), for affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to

demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f), as applicable.

21a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 22 and 23 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

22a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and

(d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

23a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct opacity observations from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

ii. ~~Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.~~

Commented [MB9]: 13(b) is a RICE MACT condition

Commented [MB10]: This is an incredibly onerous condition. This source has over 125 sources that this draft permit proposes to requires stack testing on every 5 years. The permit limits that Bunge is proposing are standard outlet grain loading rates that would be expected from a well-operated baghouse. Routine monitoring and inspections of the equipment should be sufficient to ensure compliance.

Additionally, there is no reasonable way to conduct stack testing on all processing sources at the facility within 90 days of permit issuance. Not all sources are capable of being tested (small bin vent filters, filters on pneumatic conveying, filters that exhaust from stacks that aren't capable of being modified to accommodate testing equipment, etc.).

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process

rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

24. ~~Pursuant to 40 CFR 60.46c(d)(2), as an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.~~

~~b. Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under 40 CFR 60.48c(f), as applicable.~~

25. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to

500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

26a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

27a. Pursuant to 40 CFR 60.48c(c)(1), in addition to the applicable requirements in 40 CFR 60.7, the owner or operator of an affected facility subject to the opacity limits in 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used.

For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the owner or operator shall keep the records including the information specified in 40 CFR 60.48c(c)(1)(i) through (iii).

i. Dates and time intervals of all opacity observation periods;

ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

iii. Copies of all visible emission observer opacity field data sheets;

b. ~~Pursuant to 40 CFR 60.48c(c), the owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records~~

~~and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable.~~

~~i. Calendar dates covered in the reporting period.~~

~~ii. Identification of the F-factor used in calculations, method of determination, and type of fuel combusted.~~

~~iii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.~~

~~e. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:~~

~~i. The name of the oil supplier;~~

~~ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and~~

~~iii. The sulfur content of the oil.~~

d. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding

opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

e. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

28. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

29a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).

i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.

v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

c. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.

i. An existing stationary emergency RICE.

ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.

d. Pursuant to 40 CFR 63.6655(f)(2), If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

e. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

f. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

g. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after

the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

30. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

31a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C), On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in 35 Ill. Adm. Code 214.122(b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil; and

ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA;

32a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 16(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. The amount of grain received in LTMS Truck/Rail Dump Pit (tons/month and tons/year);

ix. The amount of grain shipped from the LTMS Truck Loadout (tons/month and tons/year);

x. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

xi. Distillate fuel oil usage for Boiler #1 (gallons/month and gallons/year);

xii. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year);

xiii. Distillate fuel oil usage for the Clayton Boiler (gallons/month and gallons/year);

xiv. Operating hours of Emergency Generator Set DG-100 (hours/month and hours/year);

xv. An inspection, maintenance and repair log of Emergency Generator Set DG-100 listing each activity performed with date; and

xvi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 32(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for

inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

33. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

34a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site

rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements; a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

i. An existing stationary CI RICE located at an area source of HAP emissions.

ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

d. Pursuant to 40 CFR 63.6650(a), you must submit each report in Table 7 of 40 CFR 63 Subpart ZZZZ that applies to you.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified 40 CFR 63.6640(f)(4)(ii)	Report	a. The information in 40 CFR 63.6650(h)(1)	i. annually according to the requirements in 40 CFR 63.6650(h)(2)-(3).

e. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).

i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.

ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January

31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on December 31.

vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.

vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

f. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).

i. Company name and address.

ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

g. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

i. The report must contain the following information:

A. Company name and address where the engine is located.

B. Date of the report and beginning and ending dates of the reporting period.

C. Engine site rating and model year.

D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

E. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

F. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

G. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

35. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

36a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2)(C)(iii), on and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.122(b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

37a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank and two (2) 193 Hp diesel fire pump engines are ~~is~~ exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3)and 201.146(i), respectively.

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			11.88	11.88		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			6.71	6.71		
Dry Corn Milling, Processing and Products Handling			30.85	30.85		
Corn Mill Products Storage			0.50	0.50		
Corn Mill Products Milling and Handling			9.52	8.35		
Boiler #1						
Natural Gas	34.56	20.57	3.13	3.13	0.25	2.26
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Clayton Boiler					0	0
Natural Gas	9.98	11.89	0.90	0.90	0.07	0.65
Distillate Fuel Oil	2.13	8.50	1.40	1.40	0.09	0.09
Emergency Generator Set DG-100	0.60	2.60	0.08	0.08	0.01	0.07
Totals	49.40	52.06	66.37	65.20	0.51	3.16

GB:

Attachment B - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.
		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
§63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR 63.9(j).
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Boiler Natural Gas limits are based on a heat content higher than 1,000 Btu/CF. Using 1,000 Btu/CF the annual limits should be:

Boiler (MMBTu/hr)	Fuel Use (MMCF/yr)	CO (tpy)	NOx (tpy)	PM/PM10 (tpy)	SO2 (tpy)	VOC (tpy)
B&W (96.55)	845.8	35.52	21.14	3.21	0.25	2.33
Clayton (27.90)	244.4	10.26	12.22	0.93	0.07	0.67

Changes to emission unit (filter and cyclone) grain loading based on what is achievable and can be demonstrated. Below is the justification for the grain loading values used to calculate FESOP PTE.

Cell F15
Truck Dump No.
Stack Test Nov 15, 1999 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.00165	0.00165	0.0020	0.002

Use 90% CI and expected filter grain loading.

Cell F16/F17
Truck Dump No. 2 (and all other grain receiving baghouses)
Stack Test Feb 22, 2007 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.00017	0.00017	0.00031	0.002
PM10	0.00035	0.00017	0.00031	0.0015

Use 0.002 for PM, expected filter grain loading and because the stack test showed good values, use 0.0015 for PM10 (75% of 0.002).

Cell F18
Vacuum System Filters
Stack Test None

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.001	-	-	0.001

Expected value for vacuum filters.

Cell F19
LTMS Handling Aspiration Filter (grain handling aspiration)
Stack Test Oct 8, 2004 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.00129	0.00129	0.0015	0.0015

Use 90% CI.

Cell F37/F38
Corn Cleaning Filter (three corn cleaning filters)
Stack Test Sep 13, 2000 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP

PM	0.00063	0.00063	0.0011	0.002
PM10	0.00087	0.00063	0.0011	0.0015

Use 0.002 for PM, expected filter grain loading and because the stack test showed good values, use 0.0015 for PM10 (75% of 0.002).

Cell F39/F40
Bran/Camas Milling Aspiration
Stack Test Sep 13, 2000 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.00063	0.00034	0.00041	0.002
PM10	0.00087	0.00034	0.00041	0.0015

Use 0.002 for PM, expected filter grain loading and because the stack test showed good values, use 0.0015 for PM10 (75% of 0.002).

Cell F41/F42
S. Lunchroom Corn Milling Aspiration (use for all dry corn milling processing filters)
Stack Test Sep 14, 2000 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.00063	0.00037	0.00047	0.002
PM10	0.00087	0.00037	0.00047	0.0015

Use 0.002 for PM, expected filter grain loading and because the stack test showed good values, use 0.0015 for PM10 (75% of 0.002).

Cell F43/F44
Destrehan Esher Wyss Dryer Cyclone Stack Test (use only for whole grain dryer cyclone)
Stack Test Mar 22, 2016 Method 201A/202

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.03597	0.00040	0.00052	0.030
PM10	0.02536	0.00364	0.00432	0.020

Stack Test values from Destrehan look pretty good, but cyclone emission with condensables can be unpredictable, use a realistically expected grain loading.

Cell F45/F94
One other dry corn mill process cyclone and two specialty milling cyclones
Stack Test None

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.020	-	-	0.020

Use expected cyclone grain loading.

Cell F95
Two specialty milling filters installed after 2015
Stack Test None

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.0020	-	-	0.0020

Use expected filter grain loading.

Cell F96/F97 and F192/F193

S Lunchroom Filter (80 specialty milling filters installed prior to 2015 and 8 hominy feed mill filters)
Stack Test Sep 14, 2000 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.00037	0.00037	0.00047	0.002
PM10	0.00060	0.00037	0.0047	0.0015

Use 0.002 for PM, expected filter grain loading and because the stack test showed good values, use 0.0015 for PM10 (75% of 0.002).

Cell F95
Rail Loadout Filter (single filter only)
Stack Test Feb 10, 2011 Method 5

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM/PM10	0.00067	0.00067	0.00071	0.0020

Use expected filter grain loading.

Cell F96/F497
Tail Stock Dryer Cyclone (use only three dryer cyclones)
Stack Test Sep 13, 2000 Method 5 and 201A/202

Pollutant	AER value	Test Avg	Test 90%CI	FESOP
PM	0.0454	0.0454	0.052	0.0454
PM10	0.00193	0.00193	0.002	0.0020

Pm uses stack test average, PM10 uses expected filter and stack test 90% CI..

IEPA FESOP Draft		Vaues from the IEPA draft FESOP					
		Grain	Exhaust	Emisison Limits			
	Permit	Loading	Flow	PM/PM10		Calc'd	Calc'd
Emission Unit Desription	Condition	(gr/dscf)	(scfm)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)							
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;	17a	0.0017	18,500	0.30	1.20	0.27	1.18
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;	17a	0.0017	1,000	0.02	0.10	0.01	0.06
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;	17a	0.0017	55,000	0.78	3.40	0.80	3.51
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12;	17a	0.0017	27,000	0.39	1.70	0.39	1.72
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;	17a	0.0017	700	0.01	0.04	0.01	0.04
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;	17a	0.0006	1,900	0.01	0.04	0.01	0.04
Grain Receiving Fugitives	17a				5.40		5.40
					11.88		**11.95**
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):							
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;	17b	0.0017	36,017	0.52	2.30	0.52	2.30
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;	17b	0.00085	41,000	0.30	1.31	0.30	1.31
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;	17b	0.00085	57,372	0.42	1.83	0.42	1.83

North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;	17b	0.0017	20,000	0.29	1.28	0.29	1.28
					6.72		**6.72**
Dry Corn Milling, Processing and Products Handling:							
Bemis Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;	17c	0.0006	1,660	0.01	0.04	0.01	0.04
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;	17c	0.0006	3,400	0.02	0.08	0.02	0.08
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;	17c	0.0006	4,400	0.02	0.10	0.02	0.10
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;	17c	0.0006	2,800	0.01	0.06	0.01	0.06
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;	17c	0.0006	8,230	0.04	0.19	0.04	0.19
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;	17c	0.0006	13,000	0.07	0.29	0.07	0.29
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;	17c	0.0006	13,295	0.07	0.30	0.07	0.30
8th FR DRACCO Screening (4880-0034-0027) controlled by Baghouse Filters DRACO 6MB-60;	17c	0.0006	42,000	0.22	0.95	0.22	0.95
9th FR DRACCO Screening (4880-0034-0001) controlled by Baghouse Filters DRACO 8MB-72;	17c	0.0006	69,500	0.36	1.57	0.36	1.57
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;	17c	0.0006	1,500	0.01	0.03	0.01	0.03
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;	17c	0.0006	36,000	0.19	0.81	0.19	0.81

Bldg 114 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;	17c	0.0006	1,500	0.01	0.03	0.01	0.03
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;	17c	0.0006	1,960	0.01	0.04	0.01	0.04
6th Flr Screening (4880-0008-0028) controlled by Baghouse Filters WIEDENMANN 2X4 LF150-1200;	17c	0.0006	10,000	0.05	0.23	0.05	0.23
West 4th Floor Gravity Tables (4880-0008-0040) controlled by Baghouse Filters WIEDENMANN 2X5 LF225-2250;	17c	0.0006	10,000	0.05	0.23	0.05	0.23
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;	17c	0.0006	42,000	0.22	0.95	0.22	0.95
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12,	17c	0.0006	37,500	0.19	0.84	0.19	0.84
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12,	17c	0.0006	30,000	0.15	0.68	0.15	0.68
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;	17c	0.0006	36,000	0.19	0.81	0.19	0.81
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;	17c	0.0006	42,000	0.22	0.95	0.22	0.95
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;	17c	0.0006	45,021	0.23	1.01	0.23	1.01
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;	17c	0.0006	56,000	0.29	1.26	0.29	1.26
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;	17c	0.0006	825	0.01	0.02	0.004	0.02
Gravity Table #3 (4880-0044-0070)controlled by Baghouse Filters TORIT CPC-12;	17c	0.0006	6,200	0.03	0.14	0.03	0.14

	Gravity Table #4 (4880-0044-0073) controlled by Baghouse Filters TORIT CPC-12;	17c	0.0006	6,200	0.03	0.14	0.03	0.14
	Gravity Table #5 (4880-0044-0076) controlled by Baghouse Filters TORIT CPC-12;	17c	0.0006	6,200	0.03	0.14	0.03	0.14
	Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;	17c	0.0006	440	0.01	0.01	0.002	0.01
X	GERM General Aspiration (4880-0009-0005) controlled by Baghouse Filters APM 16030.4;	17c	0.0006					
	Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;	17c	0.0006	900	0.01	0.02	0.0046	0.02
	AB Fin Product Surge Bin North (4900-0003-0039) controlled by Baghouse Filters MICROPUL 8B;	17c	0.0006	742	0.01	0.02	0.0038	0.02
	AB Fin Product Surge Bin South (4900-0003-0045) controlled by Baghouse Filters MICROPUL 8B;	17c	0.0006	742	0.01	0.02	0.0038	0.02
	1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;	17c	0.0006	380	0.01	0.01	0.002	0.01
	1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;	17c	0.0006	380	0.01	0.01	0.002	0.01
	3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;	17c	0.0006	380	0.01	0.01	0.002	0.01
	9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
	7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
	#3 Pulvocron (4990-0002-0019) controlled by Baghouse	17c	0.0006	2,904	0.01	0.07	0.01	0.07

#4 Pulvocron (4990-0002-0022) controlled by Baghouse	17c	0.0006	2,904	0.01	0.07	0.01	0.07
#5 Pulvocron (4900-0001-0039)) controlled by Baghouse	17c	0.0006	2,904	0.01	0.07	0.01	0.07
#1 Pulvocron (4990-0005-0021) controlled by Baghouse Filter BUHLER 37-8-220;	17c	0.0006	2,904	0.01	0.07	0.01	0.07
#2 Pulvocron (4990-0005-0024) controlled by Baghouse Filter BUHLER 37-8-220;	17c	0.0006	2,904	0.01	0.07	0.01	0.07
#7 Pulvocron (4990-0003-0019)controlled by Baghouse Filter APM 16022.8;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
#8 Pulvocron (4990-0003-0022) controlled by Baghouse Filter APM 16022.8;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
#9 Pulvocron (4990-0004-0022) controlled by Baghouse Filter APM 16022.8;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
#10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filter APM 16022.8;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;	17c	0.0006	500	0.01	0.01	0.003	0.01
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;	17c	0.0006	500	0.01	0.01	0.003	0.01
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;	17c	0.0006	570	0.01	0.01	0.003	0.01
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;	17c	0.0006	500	0.01	0.01	0.003	0.01
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B,	17c	0.0006	500	0.01	0.01	0.003	0.01

3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;	17c	0.0006	500	0.01	0.01	0.003	0.01
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;	17c	0.0006	570	0.01	0.01	0.003	0.01
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;	17c	0.0006	570	0.01	0.01	0.003	0.01
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;	17c	0.0006	7,200	0.04	0.16	0.04	0.16
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;	17c	0.0006	4,077	0.02	0.09	0.02	0.09
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;	17c	0.0006	10,000	0.05	0.23	0.05	0.23
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;	17c	0.0006	867	0.01	0.02	0.004	0.02
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	400	0.01	0.01	0.002	0.01
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;	17c	0.0006	4,452	0.02	0.10	0.02	0.1
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;	17c	0.0006	1,435	0.01	0.03	0.01	0.03
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;	17c	0.0006	9,158	0.05	0.21	0.05	0.21
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;	17c	0.0006	700	0.01	0.02	0.004	0.02

Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;	17c	0.0006	780	0.01	0.02	0.004	0.02
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;	17c	0.0006	1,100	0.01	0.02	0.01	0.02
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;	17c	0.0006	1,100	0.01	0.02	0.01	0.02
Bin 308 (4990-0002-0033) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Bin 309 (4990-0002-0036) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Bin 310 (4820-0003-0038) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Bin 508 (4820-0002-0068) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Bin 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;	17c	0.0006	509	0.01	0.01	0.003	0.01
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;	17c	0.0006	700	0.01	0.02	0.004	0.02
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;	17c	0.0006	807	0.01	0.02	0.004	0.02
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;	17c	0.0006	6,000	0.03	0.14	0.03	0.14
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;	17c	0.0006	1,250	0.01	0.03	0.01	0.03
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;	17c	0.0006	1,055	0.01	0.02	0.01	0.02
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;	17c	0.0006	1,645	0.01	0.04	0.01	0.04

CSB Binning General Aspiration (4820-0003-0063) controlled by Baghouse Filters BUHLER 64S-6-20;	17c	0.0006	3,200	0.02	0.07	0.02	0.07
CSB Binning General Aspiration (4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;	17c	0.0006	2,739	0.01	0.06	0.01	0.06
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;	17c	0.0006	742	0.01	0.02	0.004	0.02
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;	17c	0.0006	3,000	0.02	0.07	0.02	0.07
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;	17c	0.0006	648	0.01	0.01	0.003	0.01
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;	17c	0.0006	2,241	0.01	0.05	0.01	0.05
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;	17c	0.0006	1,232	0.01	0.03	0.01	0.03
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;	17c	0.0006	1,500	0.01	0.03	0.01	0.03
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;	17c	0.0006	1,400	0.01	0.03	0.01	0.03
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;	17c	0.0006	1,000	0.01	0.02	0.01	0.02
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;	17c	0.0006	14,000	0.07	0.32	0.07	0.32
Ingredient Bin 601 (4820-0003-0022) controlled by Baghouse Filters MICROPUL 4B;	17c	0.0006	210	0.01	0.01	0.0011	0.0047

Ingredient Bin 602 (4820-0003-0026) controlled by Baghouse Filters MICROPUL 4B;	17c	0.0006	210	0.01	0.01	0.0011	0.0047
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;	17c	0.0006	210	0.01	0.01	0.0011	0.0047
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;	17c	0.0006	210	0.01	0.01	0.0011	0.0047
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;	17c	0.0006	2,500	0.01	0.06	0.01	0.06
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;	17c	0.0006	1,500	0.01	0.03	0.01	0.03
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;	17c	0.0006	1,258	0.01	0.03	0.01	0.03
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;	17c	0.0006	1,017	0.01	0.02	0.01	0.02
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;	17c	0.0006	27,550	0.14	0.62	0.14	0.62
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;	17c	0.0006	2,904	0.01	0.07	0.01	0.07
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;	17c	0.0006	570	0.01	0.01	0.003	0.01
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;	17c	0.0006	705	0.01	0.02	0.004	0.02
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;	17c	0.0006	2,143	0.01	0.05	0.01	0.05

Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;	17c	0.0006	1,350	0.01	0.03	0.01	0.03
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;	17c	0.0006	500	0.01	0.01	0.003	0.01
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;	17c	0.0006	500	0.01	0.01	0.003	0.01
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;	17c	0.0006	2,100	0.01	0.05	0.01	0.05
N DAY General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;	17c	0.0006	36,000	0.19	0.81	0.19	0.81
Blended Foods Filter (4820-0001-0093) controlled by Baghouse Filters DD 124RF10;	17c	0.0006	5,080	0.03	0.11	0.03	0.11
Hominy Truck Loadout Aspiration (4912-0002-0054) controlled by Baghouse Filters DD 484RF12;	17c	0.0006	37,000	0.19	0.83	0.19	0.83
South Hominy Feed (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;	17c	0.0006	15,000	0.08	0.34	0.08	0.34
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;	17c	0.0006	2,000	0.01	0.05	0.01	0.05
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;	17c	0.0006	6,888	0.04	0.16	0.04	0.16
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;	17c	0.0006	30,000	0.15	0.68	0.15	0.68
Flaking General Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;	17c	0.0006	16,000	0.08	0.36	0.08	0.36

Germ Dusters Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;	17c	0.0006	7,400	0.04	0.17	0.04	0.17
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;	17c	0.0006	10,000	0.05	0.23	0.05	0.23
Germ Rolls Aspiration (4860-0017-0072) controlled by DAY CYCLONE HV56;	17c	0.0006	5,000	0.03	0.11	0.03	0.11
Fts Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;	17c	0.0006	6,888	0.04	0.16	0.04	0.16
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL;	17c	0.0006	1,600	0.01	0.04	0.01	0.04
Cyclone Receiver - Extrusion Receiver controlled by Baghouse Filters (5&6 Allbond Receiving Filter);	17c	0.02	4,000	0.69	3.00	0.69	3
Cyclone Receiver - 108 A-Bin Receiver controlled by Baghouse Filters (5&6 Allbond Receiving Filter),	17c	0.02	500	0.09	0.38	0.09	0.38
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);	17c	0.02	682	0.12	0.53	0.12	0.51
PCM Hammermill controlled by Filter System (78-03:11);	17c	0.002	7,200	0.12	0.54	0.12	0.54
USG Hammermill controlled by Filter System (78-03:27);	17c	0.002	7,200	0.12	0.54	0.12	0.54
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);	17c	0.02	4,000	0.69	3.00	0.69	3
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c	0.002	40,600	0.7	3.05	0.7	3.05

All these in

	One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c	0	0
	One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c	0	0
	One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c	0	0
	One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c	0	0
	One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c	0	0
	Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);	17c	0	0
X	One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c	0	0
X	One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);	17c	0	0

					30.95		**30.91**
Corn Mill Products Storage:							
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;	17d	0.0006	700	0.01	0.02	0.004	0.02
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;	17d	0.0006	700	0.01	0.02	0.004	0.02
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;	17d	0.0006	21,000	0.11	0.47	0.11	0.47
					0.51		0.51
Corn Mill Products Milling and Handling:							
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;	17e	0.0006	30,000	0.15	0.68	0.15	0.68
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;	17e	0.0006	21,000	0.11	0.47	0.11	0.47
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;	17e	0.0006	34,960	0.18	0.79	0.18	0.79

Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;	17e	0.0006	34,960	0.18	0.79	0.18	0.79
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;	17e	0.0006	20,000	0.10	0.45	0.1	0.45
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;	17e	0.0006	34,600	0.18	0.78	0.18	0.78
Flour Pellet Cooler (4750-0025-0015) controlled by Baghouse Filters MAC Cyclone HE39;	17e	0.0055	8,000	0.38	1.65	0.38	1.65
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;	17e	0.0006	7,600	0.04	0.17	0.04	0.17
Hominy Loadout Fugitives	17e				1.90		1.90
Grain Loadout Fugitives	17e				0.10		0.10
					7.78		7.78
LTMS Truck/Rail Dump Pit (4750-0033-0000A);	17e				0.03		0.03
LTMS Truck Loadout (4750-0033-0000B);	17e				0.54		0.54
					0.57		0.57
Boiler House/Grounds:							
One (1) 96.55 mmBtu/hour Natural Gas/Distillate Fuel-Oil Fired Boiler with Low NO_x Burner (Boiler #1);					3.13		3.13
One (1) 27.90 mmBtu/hour Natural Gas-Fired/Distillate Fuel-Oil Fired Boiler (Clayton Boiler);					0.9		0.9
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100);					0.08		0.08
One (1) 2,168 engine Hp Diesel-Powered Emergency Generator Set (DG-100);					0.08		0.08
					4.19		4.19
					62.60		62.63

Actual Values that should be in the FESOP

FALSE means the value calc'd using IEPA data doesn't match IEPA's value		Emisison Unit Number	Source Name	Fugitive Filter Cyclone	Fugitive Filter Cyclone	Grain L PM (gr/dscf)
FALSE	FALSE	5012-0001-0016	Truck Dump #1	APM 40072.10	Filter	0.002
FALSE	FALSE	5012-0010-0054	Hoffman Bldg 301 Vacuum	HOFFMAN 48X96	Filter	0.001
FALSE	FALSE	5012-0005-0029	West Headhouse General Aspiration	DD 484RF12	Filter	0.0015
TRUE	FALSE	5012-0007-0015	Rail Dump Pit and Section D & E General Aspiration	376RF8	Filter	0.0015
TRUE	TRUE	5012-0010-0047	Track 6 Vacuum	HOFFMAN 48X96	Filter	0.001
TRUE	TRUE	4870-0013-0015	Cleanings Discharge	BUHLER 16S-6-30	Filter	0.002
		5012-0000-0000	Grain Receiving Fugitive	Fugitive	Fugitive	
TRUE	TRUE	5012-0005-0021	Truck Dump #4 w/ Gallery General Aspiration	DD 484RF12	Filter	0.002
TRUE	TRUE	4870-0013-0001	Cleaning North APM	APM 41216.12	Filter	0.002
TRUE	TRUE	4880-0034-0069	Bldg 115 Corn Cleaning	TD 484RF12	Filter	0.002

TRUE	TRUE	5012-0002-0012	North Street Truck Dump #2	DD 484RF12	Filter	0.002
TRUE	TRUE	4870-0010-0055	Bemos Bagging	APM 16019.8	Filter	0.002
TRUE	TRUE	4870-0010-0030	Bagging General Aspiration	APM 40020.8	Filter	0.002
TRUE	TRUE	4870-0013-0019	Bagging Packer General Aspiration	APM 14042.8	Filter	0.002
TRUE	TRUE	4880-0042-0057	Bran Dryer Process	APM 14036.8	Filter	0.002
TRUE	TRUE	4880-0042-0062	Bran Sifter Process	APM 10144.8	Filter	0.002
TRUE	TRUE	4880-0034-0054	East Meal Dryer/Cooler	APM 40120.10	Filter	0.002
TRUE	TRUE	4880-0034-0059	West Meal Dryer	APM 40144.8	Filter	0.002
TRUE	TRUE	4880-0034-0027	Bldg 105/115 General Aspiration	DD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0001	Bldg 102/105 General Aspiration	MCF 144-756	Filter	0.002
TRUE	TRUE	4880-0032-0052	Bldg 105 Vacuum	HOFFMAN 36x96	Filter	0.001
TRUE	TRUE	4870-0021-0001	Bulk Loading White Goods	DD 484RF12	Filter	0.002

TRUE	TRUE	4870-0015-0016	Bldg 104 Vacuum	HOFFMAN 38405A	Filter	0.001
TRUE	TRUE	4880-0042-0054	Bran Bin	BUHLER 16S-6-30	Filter	0.002
TRUE	TRUE	4880-0008-0028	Removed From Service	NA	NA	-
TRUE	TRUE	4880-0008-0040	Removed From Service	NA	NA	-
TRUE	TRUE	4880-0034-0010	South Lunchroom Screening	CD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0042	South CD Screening	CD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0048	North CD General Aspiration	CD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0019	North Lunchroom Screening	CD 484RF12	Filter	0.002
TRUE	TRUE	4870-0013-0024	Packaging and Bulk Loading Bldg 115	TD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0077	Camas/Bran Bldg 115	TD 484RF12	Filter	0.002
TRUE	TRUE	4880-0034-0071	Thru/Tail Stock Dryers Bldg 115	TD 484RF12	Filter	0.002
FALSE	TRUE	4880-0032-0070	Bldg 115 Vacuum	HOFFMAN S54002	Filter	0.001
TRUE	TRUE	4880-0044-0070	Removed From Service	NA	NA	-

TRUE	TRUE	4880-0044-0073	Removed From Service	NA	NA	-
TRUE	TRUE	4880-0044-0076	Removed From Service	NA	NA	-
FALSE	TRUE	4870-0005-0003	Track 2 Railcar Unloading Secondary Receiver	USS INC. 15CF P/D	Filter	0.002
TRUE	TRUE	4880-0009-0005	Removed From Service	NA	NA	-
FALSE	TRUE	4932-0001-0001	Lab Filter	APM 14106.4	Filter	0.002
FALSE	TRUE	4900-0003-0039	Removed From Service	NA	NA	-
FALSE	TRUE	4900-0003-0045	Removed From Service	NA	NA	-
FALSE	TRUE	4990-0005-0012	1/2 Pulvocron Meal Receiver	BUHLER 9-6-100	Filter	0.002
FALSE	TRUE	4990-0005-0042	1/2 Pulvocron Visc Flour Receiver	BUHLER 9-6-100	Filter	0.002
FALSE	TRUE	4990-0002-0010	3/4 Pulvocron Meal Receiver	BUHLER 9-6-100	Filter	0.002
TRUE	TRUE	4990-0004-0013	9/10 Pulvocron Meal Secondary Receiver	BUHLER 16009.4	Filter	0.002
TRUE	TRUE	4990-0003-0010	7/8 Pulvocron Meal Secondary Receiver	BUHLER 16009.4	Filter	0.002
TRUE	TRUE	4990-0002-0019	#3 Pulvocron	BUHLER 37-8-220	Filter	0.002

TRUE	TRUE	4990-0002-0022	#4 Pulvocron	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE	4900-0001-0039	#5 Pulvocron	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE	4990-0005-0021	#1 Pulvocron	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE	4990-0005-0024	#2 Pulvocron	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE	4990-0003-0019	#7 Pulvocron	APM 16022.8	Filter	0.002
TRUE	TRUE	4990-0003-0022	#7 Pulvocron	APM 16022.8	Filter	0.002
TRUE	TRUE	4990-0004-0022	#9 Pulvocron	APM 16022.8	Filter	0.002
TRUE	TRUE	4990-0004-0025	#10 Pulvocron	APM 16022.8	Filter	0.002
FALSE	TRUE	4990-0002-0008	3/4 Pulvocron Meal Bin	MICROPUL 2 1/2B	Filter	0.002
FALSE	TRUE	4990-0005-0010	1/2 Pulvocron Meal Bin	MICROPUL 2 1/2B	Filter	0.002
FALSE	TRUE	4990-0004-0011	9/10 Pulvocron Meal Bin	APM 16104.4	Filter	0.002
FALSE	TRUE	4990-0003-0008	7/8 Pulvocron Meal Bin	APM 16104.4	Filter	0.002
FALSE	TRUE	4990-0005-0028	1/2 Flour Surge Bin	MICROPUL 2 1/2B	Filter	0.002

FALSE	TRUE	4990-0002-0026	3/4 Flour Surge Bin	MICROPUL 2 1/2B	Filter	0.002
FALSE	TRUE	4990-0003-0026	7/8 Flour Surge Bin	APM 16104.4	Filter	0.002
FALSE	TRUE	4990-0004-0029	9/10 Flour Surge Bin	APM 16104.4	Filter	0.002
TRUE	TRUE	4990-0006-0024	Hibond Visc Flake Roller Mill	APM 15066.8	Filter	0.002
TRUE	TRUE	4820-0001-0029	CSM Blended Food Receiver	APM 40070.7	Filter	0.002
TRUE	TRUE	4820-0001-0052	Blended Food Packaging Aspiration	APM 16150.6	Filter	0.002
FALSE	TRUE	4900-0001-0068	Allbond Visc Four General Aspiration	BUHLER 16-8-100	Filter	0.002
FALSE	TRUE	4820-0003-0007	Milk Bins	MICROPUL 6B	Filter	0.002
TRUE	TRUE	4990-0007-0049	300 Series Binning	MICROPUL 1F1	Filter	0.002
TRUE	TRUE	4990-0001-0002	Soy Meal General Aspiration	APM 16022.4	Filter	0.002
FALSE	TRUE	4990-0001-0006	Soy Meal Surge Bin	MICROPUL 6B	Filter	0.002
TRUE	TRUE	4990-0001-0025	Meal Bin Cooler	APM 40072.10	Filter	0.002
FALSE	TRUE	4990-0002-0043	3/4 Soy Flour Receiver	APM 16014.8	Filter	0.002

FALSE	TRUE	4820-0003-0072	Tri Cal Bins	APM 16009.8	Filter	0.002
TRUE	TRUE	4900-0001-0058	5/6 Allbond Receiver	APM 16014.8	Filter	0.002
TRUE	TRUE	4990-0003-0032	7/8 Soy Flour Receiver	APM 16014.8	Filter	0.002
FALSE	TRUE	4990-0002-0033	Bin 308	MICROPUL 6B	Filter	0.002
FALSE	TRUE	4990-0002-0036	Bin 309	MICROPUL 6B	Filter	0.002
FALSE	TRUE	4820-0003-0038	Bin 310	MICROPUL 6B	Filter	0.002
FALSE	TRUE	4820-0002-0068	Bin 508	MICROPUL 6B	Filter	0.002
FALSE	TRUE	4820-0002-0072	Bin 509	MICROPUL 6B	Filter	0.002
FALSE	TRUE	4990-0004-0037	9/10 Pulvocron Receiver	BUHLER 16-6-220	Filter	0.002
FALSE	TRUE	4820-0002-0038	Milk Bins	MICROPUL 21-6-220	Filter	0.002
TRUE	TRUE	4820-0002-0035	Milk Bin Bag Dump	APM 14048.6	Filter	0.002
TRUE	TRUE	4990-0007-0029	Blending Batch Bin General Aspiration	BUHLER 25S-6-30	Filter	0.002
TRUE	TRUE	4990-0007-0036	Blending General Aspiration	BUHLER 16S-6-30	Filter	0.002
TRUE	TRUE	4990-0007-0032	Blending General Aspiration	MICROPUL 36S-8-30	Filter	0.002

TRUE	TRUE	4820-0003-0063	CSB Binning General Aspiration	BUHLER 64S-6-20	Filter	0.002
TRUE	TRUE	4820-0003-0059	CSB Binning General Aspiration	BUHLER 64S-6-20	Filter	0.002
FALSE	TRUE	4990-0006-0040	Finished Product General Aspiration	BUHLER 9-8-220	Filter	0.002
TRUE	TRUE	4900-0001-0091	#5 SL General Aspiration & #5 Expander	APM 14024.6	Filter	0.002
FALSE	TRUE	4990-0011-0001	Fiber Receiving General Aspiration	BUHLER 9-8-220	Filter	0.002
TRUE	TRUE	4820-0002-0011	PCM Binning	MICROPUL 1F1	Filter	0.002
TRUE	TRUE	4870-0010-0005	CF Bran Packing Binning	MICROPUL 25-8-220	Filter	0.002
TRUE	TRUE	4900-0005-0035	Bldg 111 Vacuum	HOFFMAN 60X120	Filter	0.001
TRUE	TRUE	4870-0006-0006	110/210 Receiver General Aspiration	APM 16030.4	Filter	0.002
TRUE	TRUE	4990-0011-0029	Fiber Receiving General Aspiration	APM 16019.4	Filter	0.002
TRUE	TRUE	4990-0001-0029	Cooling Tower	APM 40072.10	Filter	0.002
FALSE	FALSE	4820-0003-0022	Ingredient Bin 601	MICROPUL 4B	Filter	0.002

FALSE	FALSE	4820-0003-0026	Ingredient Bin 602	MICROPUL 4B	Filter	0.002
FALSE	FALSE	4820-0003-0030	Ingredient Bin 603	MICROPUL 2 1/2 B	Filter	0.002
FALSE	FALSE	4820-0003-0034	Ingredient Bin 604	APM 15105.4	Filter	0.002
TRUE	TRUE	4820-0003-0018	Micro Ingredient Dump Aspiration	APM 15105.4	Filter	0.002
TRUE	TRUE	4820-0003-0004	Mixer General Aspiration	BUHLER 25S-6-30	Filter	0.002
TRUE	TRUE	4900-0001-0065	3/4 Hammermill	APM 16009.6	Filter	0.002
TRUE	TRUE	4900-0001-0006	#3 & #4 Expanders	APM 16009.6	Filter	0.002
TRUE	TRUE	4900-0005-0001	Reprocessing General Aspiration	CD 376RF10	Filter	0.002
TRUE	TRUE	4900-0001-0042	#5 Pulvocron	BUHLER 37-8-220	Filter	0.002
FALSE	TRUE	4900-0001-0046	5/6 Pulverizer AB Finished Product Surge Bin	MICROPUL 4B	Filter	0.002
FALSE	TRUE	4900-0002-0032	Pellet Bins	BUHLER 16S-6-30	Filter	0.002
TRUE	TRUE	4990-0006-0027	Viscosity Flour Receiver	APM 16022.8	Filter	0.002

TRUE	TRUE		4990-0011-0010	Conditioning Receiver/Soy Meal Grinding	APM 16014.8	Filter	0.002
FALSE	TRUE		4900-0005-0007	Grind Reject/Scrap Bin	MICROPUL 2 1/2B	Filter	0.002
FALSE	TRUE		4900-0005-0029	Bldg 112 Vacuum	HOFFMAN 36x96	Filter	0.001
TRUE	TRUE		4900-0001-0030	AB Grinder Surge Bin	BUHLER 37-8-220	Filter	0.002
TRUE	TRUE		4900-0005-0006	N CD General Aspiration & #5 Expander	CD 484RF12	Filter	0.002
TRUE	TRUE		4820-0001-0093	Removed From Service and Repurposed as 4880-0048-0012	NA	NA	-
TRUE	TRUE	pending repurpose	4912-0002-0054	Hominy Bulk Truck Loadout Aspiration	DD 484RF12	Filter	0.002
TRUE	TRUE		4860-0018-0003	South Hominy Feed Bin General Aspiration	MICROPUL 1F2	Filter	0.002
TRUE	TRUE		4860-0022-0017	Secondary Clean Grinding	APM 15030.8	Filter	0.002
TRUE	TRUE		4860-0024-0003	Bran Dryer	CORONA 15	Cyclone	0.0454
TRUE	TRUE		4912-0006-0017	Track 16 Rail Loadout	WEIDENMAN LFT 2X7	Filter	0.002
TRUE	TRUE		4860-0017-0073	Germ Dust Aspiration	AERODYNE	Cyclone	0.02

TRUE	TRUE		4860-0023-0001	Feed Mill General Aspiration	APM 40120.8	Filter	0.002
TRUE	TRUE		4860-0017-0003	Germ Dryer	CORONA HV56	Cyclone	0.0454
TRUE	TRUE		4860-0017-0072	Removed From Service	NA	NA	-
TRUE	TRUE		4860-0019-0003	FTS Dryer Aspiration	CORONA HV60	Filter	0.0454
TRUE	TRUE		4860-0024-0037	Pet Bran Kice Lites Aspiration	MICROPUL 36S-6-30	Filter	0.002
TRUE	TRUE		4900-0001-0058	This equipment is part of the 4900-0001-0058 process emission unit. Not a separate emisison unit.	NA	NA	-
TRUE	TRUE		4900-0001-0058	This equipment is part of the 4900-0001-0058 process emission unit. Not a separate emisison unit.	NA	NA	-
TRUE	FALSE		4880-0048-0012	Pneumatic Lift Receiver for WG260 Transfer	BUHLER MGX-60	Cyclone	0.02
TRUE	TRUE		4900-0003-0011	PCM Hammermill	Kice VS64-8	Filter	0.0020
TRUE	TRUE		4900-0008-0027	USG Hammermill	Kice VS64-8	Filter	0.0020
TRUE	TRUE		4900-0008-0022	USG Secondary Extruder Transfer	Kice CHS26	Cyclone	0.0200
TRUE	TRUE	pending project	Not Yet Assigned	This Unit Does Not Yet Exist	Not Yet Assigned		-

TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE	pending project	Same as above	Same as above	Same as above		-
TRUE	TRUE		4880-0034-0027	This equipmetn will become part of the 4880-0034-0027 process emission unit. Not a separate emisison unit.	Will not be controlled by the S 105 Carter-Day Filter		
TRUE	TRUE		4880-0034-0001	Will become part of the 4880-0034-0001 process emission unit group. Not a separate emisison unit.	Will not be controlled by the S 105 Carter-Day Filter		
		still in service	4880-0034-0035	South APM Binning	APM 41144.12	Filter	0.0020
			4880-0046-0017	Whole Grain Dryer	KICE HV-26	Cyclone	0.0300
			4880-0046-0028	Whole Grain Hammermill	MAC MSS16	Filter	0.0020

			4880-0046-0042	Whole Grain Aspiration	TD 124RF10		0.0020
			4900-0007-0020	USG Primary Extruder Transfer	Kice CHS26	Cyclone	0.0200
			4860-0018-0044	6th Floor Radar Pulsar	MICROPUL 100S-6-20	Filter	0.0020
		still in service	4750-0029-0015	Feed Mill Conveying General Aspiration	MICROPUL 100S-6-20	Filter	0.0020
		still in service	4750-0029-0027	Round Bin General Aspiration	APM 14072.6	Filter	0.0020
		still in service	4860-0017-0026	Bin 945 Germ Receiver	BUHLER 36S-6-30	Filter	0.0020
		still in service	4860-0018-0007	North Hominy Feed Grinding General Aspiration	MICROPUL 1F2	Filter	0.0020
FALSE	TRUE		4912-0008-0006	Bldg 201/202 Vacuum	HOFFMAN	Filter	0.0010
FALSE	TRUE		4912-0009-0005	Bldg 201/202 Vacuum	HOFFMAN	Filter	0.0010
TRUE	TRUE		4860-0018-0049	Hominy Feed Bins Aspiration	Donaldson 276RFW12	Filter	0.0020
TRUE	TRUE		4750-0029-0032	Hominy Binning	APM 40240.8	Filter	0.0020
TRUE	TRUE		4750-0029-0001	Hominy Grind General Aspiration	MICROPUL 100S-6-20	Filter	0.0020
TRUE	TRUE		4912-0004-0022	Hominy Truck Loadout	376RF8	Filter	0.0020

TRUE	TRUE	4912-0003-0011	Track 15 Bulk Rail Loadout	376RF8	Filter	0.0020
TRUE	TRUE	4750-0025-0015	Removed From Service	NA	NA	
TRUE	TRUE	4750-0025-0015	Removed From Service	NA	NA	
TRUE	TRUE	4750-0025-0015	Removed From Service	NA	NA	
TRUE	TRUE	4750-0029-0045	Hominy Screener General Aspiration	MICROPUL 100S-6-20	Filter	0.0020
		4912-0000-0000	Hominy Loadout Fugitive	Fugitive	Fugitive	
		4912-0000-0001	Grain Loadout Fugitive	Fugitive	Fugitive	
		4750-0025-0015	Removed From Service	NA	NA	
		4750-0025-0015	Removed From Service	NA	NA	
		4840-0004-0004	B&W 96.55 MMBtu/hr Natural Gas Boiler	NA	NA	
		4840-0006-0007	Clayton 27.90 MMBtu/hr Natural Gas Boiler	NA	NA	
			Removed From Service	NA	NA	
		4800-4861-0000	Two 193 HP Emergency Diesel Fire Pumps	NA	NA	

After Pending CCM260 Project

pending project	4912-0002-0054	CCM260 Process Aspiration	S 105 Carter-Day	filter	0.0020
reused as CCM260 filter	4912-0002-0054	Hominy Bulk Truck Loadout Aspiration	DD 484RF12	filter	0.002
removed	4880-0034-0035	South APM Binning	APM 41144.12	filter	0.0020
removed	4750-0029-0015	Feed Mill Conveying General Aspiration	MICROPUL 100S-6-20	filter	0.0020
removed	4750-0029-0027	Round Bin General Aspiration	APM 14072.6	filter	0.0020
removed	4860-0017-0026	Bin 945 Germ Receiver	BUHLER 36S-6-30	filter	0.0020
removed	4860-0018-0007	North Hominy Feed Grinding General Aspiration	MICROPUL 1F2	filter	0.0020

oading PM10 (gr/dscf)	Exhaust Flow (scfm)	Actual PM Max (lb/hr)	PM Max (tpy)	PM10 Max (lb/hr)	PM10 Max (tpy)	These are used to check the data for accuracy		PM Max (tpy)			
0.0015	18,500	0.32	1.39	0.24	1.04	18,500	TRUE	1.39	1.04	TRUE	TRUE
0.001	1,000	0.01	0.04	0.01	0.04	1,000	TRUE	0.04	0.04	TRUE	TRUE
0.0015	55,000	0.71	3.1	0.71	3.1	55,000	TRUE	3.10	3.1	TRUE	TRUE
0.0015	21,600	0.28	1.22	0.28	1.22	21,600	TRUE	1.22	1.22	TRUE	TRUE
0.001	700	0.01	0.03	0.01	0.03	700	TRUE	0.03	0.03	TRUE	TRUE
0.0015	1,900	0.03	0.14	0.02	0.11	1,900	TRUE	0.14	0.11	TRUE	TRUE
			3.01		3.01			3.01	3.01		
			8.93		**8.55**			**8.93**	**8.55**		
0.002	36,017	0.62	2.7	0.62	2.7	36,017	TRUE	2.70	2.7	TRUE	TRUE
0.0015	41,000	0.7	3.08	0.53	2.31	41,000	TRUE	3.08	2.31	TRUE	TRUE
0.0015	57,372	0.98	4.31	0.74	3.23	57,372	TRUE	4.31	3.23	TRUE	TRUE

0.0015	25,109	0.43	1.89	0.32	1.41	25,109	TRUE	1.89	1.41	TRUE	TRUE
			11.98		**9.65**			**11.98**	**9.65**		
0.0015	1,660	0.03	0.12	0.02	0.09	1,660	TRUE	0.12	0.09	TRUE	TRUE
0.0015	3,400	0.06	0.26	0.04	0.19	3,400	TRUE	0.26	0.19	TRUE	TRUE
0.0015	4,400	0.08	0.33	0.06	0.25	4,400	TRUE	0.33	0.25	TRUE	TRUE
0.0015	2,200	0.04	0.17	0.03	0.12	2,200	TRUE	0.17	0.12	TRUE	TRUE
0.0015	6,215	0.11	0.47	0.08	0.35	6,215	TRUE	0.47	0.35	TRUE	TRUE
0.0015	13,000	0.22	0.98	0.17	0.73	13,000	TRUE	0.98	0.73	TRUE	TRUE
0.0015	13,295	0.23	1	0.17	0.75	13,295	TRUE	1.00	0.75	TRUE	TRUE
0.0015	43,700	0.75	3.28	0.56	2.46	43,700	TRUE	3.28	2.46	TRUE	TRUE
0.0015	55,000	0.94	4.13	0.71	3.1	55,000	TRUE	4.13	3.1	TRUE	TRUE
0.001	1,500	0.01	0.06	0.01	0.06	1,500	TRUE	0.06	0.06	TRUE	TRUE
0.0015	36,000	0.62	2.7	0.46	2.03	36,000	TRUE	2.70	2.03	TRUE	TRUE

0.001	1,500	0.01	0.06	0.01	0.06	1,500	TRUE	0.06	0.06	TRUE	TRUE
0.0015	980	0.02	0.07	0.01	0.06	980	TRUE	0.07	0.06	TRUE	TRUE
-	-	-	-	-	-						
-	-	-		-	-						
0.0015	42,826	0.73	3.22	0.55	2.41	42,826	TRUE	3.22	2.41	TRUE	TRUE
0.0015	41,000	0.70	3.08	0.53	2.31	41,000	TRUE	3.08	2.31	TRUE	TRUE
0.0015	33,300	0.57	2.5	0.43	1.88	33,300	TRUE	2.50	1.88	TRUE	TRUE
0.0015	40,000	0.69	3.00	0.51	2.25	40,000	TRUE	3.00	2.25	TRUE	TRUE
0.0015	42,000	0.72	3.15	0.54	2.37	42,000	TRUE	3.15	2.37	TRUE	TRUE
0.0015	45,021	0.77	3.38	0.58	2.54	45,021	TRUE	3.38	2.54	TRUE	TRUE
0.0015	56,000	0.96	4.2	0.72	3.15	56,000	TRUE	4.20	3.15	TRUE	TRUE
0.001	825	0.01	0.03	0.01	0.03	825	TRUE	0.03	0.03	TRUE	TRUE
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0.0015	440	0.01	0.03	0.01	0.02	440	TRUE	0.03	0.02	TRUE	TRUE
-	-	-	-	-	-						
0.0015	900	0.02	0.07	0.01	0.05	900	TRUE	0.07	0.05	TRUE	TRUE
-	-	-	-	-	-						
-	-	-	-	-	-						
0.0015	380	0.01	0.03	0	0.02	380	TRUE	0.03	0.02	TRUE	TRUE
0.0015	380	0.01	0.03	0	0.02	380	TRUE	0.03	0.02	TRUE	TRUE
0.0015	380	0.01	0.03	0	0.02	380	TRUE	0.03	0.02	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE

0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE
0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE
0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE
0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	570	0.01	0.04	0.01	0.03	570	TRUE	0.04	0.03	TRUE	TRUE
0.0015	570	0.01	0.04	0.01	0.03	570	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE

0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	570	0.01	0.04	0.01	0.03	570	TRUE	0.04	0.03	TRUE	TRUE
0.0015	570	0.01	0.04	0.01	0.03	570	TRUE	0.04	0.03	TRUE	TRUE
0.0015	7,200	0.12	0.54	0.09	0.41	7,200	TRUE	0.54	0.41	TRUE	TRUE
0.0015	4,077	0.07	0.31	0.05	0.23	4,077	TRUE	0.31	0.23	TRUE	TRUE
0.0015	10,000	0.17	0.75	0.13	0.56	10,000	TRUE	0.75	0.56	TRUE	TRUE
0.0015	867	0.01	0.07	0.01	0.05	867	TRUE	0.07	0.05	TRUE	TRUE
0.0015	400	0.01	0.03	0.01	0.02	400	TRUE	0.03	0.02	TRUE	TRUE
0.0015	4,452	0.08	0.33	0.06	0.25	4,452	TRUE	0.33	0.25	TRUE	TRUE
0.0015	1,435	0.02	0.11	0.02	0.08	1,435	TRUE	0.11	0.08	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	14,000	0.24	1.05	0.18	0.79	14,000	TRUE	1.05	0.79	TRUE	TRUE
0.0015	700	0.01	0.05	0.01	0.04	700	TRUE	0.05	0.04	TRUE	TRUE

0.0015	780	0.01	0.06	0.01	0.04	780	TRUE	0.06	0.04	TRUE	TRUE
0.0015	1,100	0.02	0.08	0.01	0.06	1,100	TRUE	0.08	0.06	TRUE	TRUE
0.0015	1,100	0.02	0.08	0.01	0.06	1,100	TRUE	0.08	0.06	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.0015	700	0.01	0.05	0.01	0.04	700	TRUE	0.05	0.04	TRUE	TRUE
0.0015	867	0.01	0.07	0.01	0.05	867	TRUE	0.07	0.05	TRUE	TRUE
0.0015	6,000	0.10	0.45	0.08	0.34	6,000	TRUE	0.45	0.34	TRUE	TRUE
0.0015	1,250	0.02	0.09	0.02	0.07	1,250	TRUE	0.09	0.07	TRUE	TRUE
0.0015	1,055	0.02	0.08	0.01	0.06	1,055	TRUE	0.08	0.06	TRUE	TRUE
0.0015	1,645	0.03	0.12	0.02	0.09	1,645	TRUE	0.12	0.09	TRUE	TRUE

0.0015	3,200	0.05	0.24	0.04	0.18	3,200	TRUE	0.24	0.18	TRUE	TRUE
0.0015	2,739	0.05	0.21	0.04	0.15	2,739	TRUE	0.21	0.15	TRUE	TRUE
0.0015	742	0.01	0.06	0.01	0.04	742	TRUE	0.06	0.04	TRUE	TRUE
0.0015	3,000	0.05	0.23	0.04	0.17	3,000	TRUE	0.23	0.17	TRUE	TRUE
0.0015	648	0.01	0.05	0.01	0.04	648	TRUE	0.05	0.04	TRUE	TRUE
0.0015	2,241	0.04	0.17	0.03	0.13	2,241	TRUE	0.17	0.13	TRUE	TRUE
0.0015	1,232	0.02	0.09	0.02	0.07	1,232	TRUE	0.09	0.07	TRUE	TRUE
0.001	1,500	0.01	0.06	0.01	0.06	1,500	TRUE	0.06	0.06	TRUE	TRUE
0.0015	1,400	0.02	0.11	0.02	0.08	1,400	TRUE	0.11	0.08	TRUE	TRUE
0.0015	1,000	0.02	0.08	0.01	0.06	1,000	TRUE	0.08	0.06	TRUE	TRUE
0.0015	14,000	0.24	1.05	0.18	0.79	14,000	TRUE	1.05	0.79	TRUE	TRUE
0.0015	210	0.004	0.02	0.003	0.01	210	TRUE	0.02	0.01	TRUE	TRUE

0.0015	210	0.004	0.02	0.003	0.01	210	TRUE	0.02	0.01	TRUE	TRUE
0.0015	210	0.004	0.02	0.003	0.01	210	TRUE	0.02	0.01	TRUE	TRUE
0.0015	210	0.004	0.02	0.003	0.01	210	TRUE	0.02	0.01	TRUE	TRUE
0.0015	2,500	0.04	0.19	0.03	0.14	2,500	TRUE	0.19	0.14	TRUE	TRUE
0.0015	1,500	0.03	0.11	0.02	0.08	1,500	TRUE	0.11	0.08	TRUE	TRUE
0.0015	1,258	0.02	0.09	0.02	0.07	1,258	TRUE	0.09	0.07	TRUE	TRUE
0.0015	1,017	0.02	0.08	0.01	0.06	1,017	TRUE	0.08	0.06	TRUE	TRUE
0.0015	27,550	0.47	2.07	0.35	1.55	27,550	TRUE	2.07	1.55	TRUE	TRUE
0.0015	2,904	0.05	0.22	0.04	0.16	2,904	TRUE	0.22	0.16	TRUE	TRUE
0.0015	570	0.01	0.04	0.01	0.03	570	TRUE	0.04	0.03	TRUE	TRUE
0.0015	705	0.01	0.05	0.01	0.04	705	TRUE	0.05	0.04	TRUE	TRUE
0.0015	2,143	0.04	0.16	0.03	0.12	2,143	TRUE	0.16	0.12	TRUE	TRUE

0.0015	1,350	0.02	0.1	0.02	0.08	1,350	TRUE	0.10	0.08	TRUE	TRUE
0.0015	500	0.01	0.04	0.01	0.03	500	TRUE	0.04	0.03	TRUE	TRUE
0.001	500	0	0.02	0	0.02	500	TRUE	0.02	0.02	TRUE	TRUE
0.0015	2,100	0.04	0.16	0.03	0.12	2,100	TRUE	0.16	0.12	TRUE	TRUE
0.0015	36,000	0.62	2.7	0.46	2.03	36,000	TRUE	2.70	2.03	TRUE	TRUE
-	-	-	-	-	-						
0.0015	37,000	0.63	2.78	0.48	2.08	37,000	TRUE	2.78	2.08	TRUE	TRUE
0.0015	15,000	0.26	1.13	0.19	0.84	15,000	TRUE	1.13	0.84	TRUE	TRUE
0.0015	2,000	0.03	0.15	0.03	0.11	2,000	TRUE	0.15	0.11	TRUE	TRUE
0.002	6,888	2.68	11.74	0.12	0.52	6,888	TRUE	11.74	0.52	TRUE	TRUE
0.0015	30,000	0.51	2.25	0.39	1.69	30,000	TRUE	2.25	1.69	TRUE	TRUE
0.02	7,400	1.27	5.56	1.27	5.56	7,400	TRUE	5.56	5.56	TRUE	TRUE

0.0015	16,000	0.27	1.2	0.21	0.9	16,000	TRUE	1.20	0.9	TRUE	TRUE
0.002	10,000	3.89	17.04	0.17	0.75	10,000	TRUE	17.04	0.75	TRUE	TRUE
-	-	-	-	-	-						
0.002	6,888	2.68	11.74	0.12	0.52	6,888	TRUE	11.74	0.52	TRUE	TRUE
0.0015	1,600	0.03	0.12	0.02	0.09	1,600	TRUE	0.12	0.09	TRUE	TRUE
-	-	-	-	-	-						
-	-	-	-	-	-						
0.02	682	0.12	0.51	0.12	0.51	682	TRUE	0.51	0.51	TRUE	TRUE
0.0020	6,500	0.11	0.49	0.11	0.49	6,500	TRUE	0.49	0.49	TRUE	TRUE
0.0020	6,500	0.11	0.49	0.11	0.49	6,500	TRUE	0.49	0.49	TRUE	TRUE
0.0200	4,000	0.69	3.00	0.69	3.00	4,000	TRUE	3.00	3.00	TRUE	TRUE
-	-	-	-	-	-						

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-	-	-	-	-	-							
0.0015	30,000	0.51	2.25	0.39	1.69		30,000	TRUE	2.25	1.69	TRUE	TRUE
0.0200	1,400	0.36	1.58	0.24	1.05		1,400	TRUE	1.58	1.05	TRUE	TRUE
0.0015	6,000	0.1	0.45	0.08	0.34		6,000	TRUE	0.45	0.34	TRUE	TRUE

0.0015	5,080	0.09	0.38	0.07	0.29	5,080	TRUE	0.38	0.29	TRUE	TRUE
0.0200	4,000	0.69	3.00	0.69	3.00	4,000	TRUE	3.00	3	TRUE	TRUE
0.0015	7,400	0.13	0.56	0.1	0.42	7,400	TRUE	0.56	0.42	TRUE	TRUE
0.0015	7,600	0.13	0.57	0.1	0.43	7,600	TRUE	0.57	0.43	TRUE	TRUE
0.0015	7,134	0.12	0.54	0.09	0.40	7,134	TRUE	0.54	0.4	TRUE	TRUE
0.0015	1,800	0.03	0.14	0.02	0.10	1,800	TRUE	0.14	0.1	TRUE	TRUE
0.0015	14,000	0.24	1.05	0.18	0.79	14,000	TRUE	1.05	0.79	TRUE	TRUE
			120.92		**65.20**			**120.92**	**65.20**		
0.0010	700	0.01	0.03	0.01	0.03	700	TRUE	0.03	0.03	TRUE	TRUE
0.0010	700	0.01	0.03	0.01	0.03	700	TRUE	0.03	0.03	TRUE	TRUE
0.0015	21,000	0.36	1.58	0.27	1.18	21,000	TRUE	1.58	1.18	TRUE	TRUE
			1.64		1.24			1.64	1.24		
0.0015	30,000	0.51	2.25	0.39	1.69	30,000	TRUE	2.25	1.69	TRUE	TRUE
0.0015	21,000	0.36	1.58	0.27	1.18	21,000	TRUE	1.58	1.18	TRUE	TRUE
0.0015	34,960	0.6	2.62	0.45	1.97	34,960	TRUE	2.62	1.97	TRUE	TRUE

0.0020	34,960	0.6	2.62	0.6	2.62		34,960	TRUE	2.62	2.62	TRUE	TRUE
0.0015	7,600	0.13	0.57	0.1	0.43		7,600	TRUE	0.57	0.43	TRUE	TRUE
			6.90		1.02				6.90	1.02		
			0.10		0.10				0.00	0.00		
			16.64		9.01				16.54	8.91		
			0.00		0.00							
			3.21		3.21							
			0.93		0.93							
			0.05		0.04							
			4.19		4.18							
			160.11		93.65				160.01	93.55		

		Total PTE	**164.30**		**97.83**	160.01	93.55
0.0020	40,600	0.7	3.05	0.7	3.05		
0.0015	-37,000	-0.63	-2.78	-0.48	-2.08		
0.0015	-30,000	-0.51	-2.25	-0.39	-1.69		
0.0015	-7,600	-0.13	-0.57	-0.1	-0.43		
0.0015	-7,134	-0.12	-0.54	-0.09	-0.40		
0.0015	-1,800	-0.03	-0.14	-0.02	-0.10		
0.0015	-14,000	-0.24	-1.05	-0.18	-0.79		
		Post CCM260 Project					
		Total PTE	**160.02**		**95.39**		

	Emisison Unit Number	PM Max (tpy)	PM10 Max (lb/hr)
Yes	5012-0000-0000	0	0
Yes	5012-0001-0016	0.32	0.24
Yes	5012-0002-0012	0.43	0.32
Yes			
Yes			
Yes			
	5012-0005-0021	0.62	0.62
	5012-0005-0029	0.71	0.71
Yes	5012-0007-0015	0.28	0.28
Yes			
Yes	5012-0010-0047	0.01	0.01

Yes	5012-0010-0054	0.01	0.01
		2.38	**2.19**
Yes	4870-0005-0003	0.01	0.01
Yes	4870-0006-0006	0.02	0.02
Yes	4870-0010-0005	0.02	0.02
Yes	4870-0010-0030	0.06	0.04
Yes	4870-0010-0055	0.03	0.02
Yes	4870-0013-0001	0.7	0.53
Yes	4870-0013-0015	0.03	0.02
Yes	4870-0013-0019	0.08	0.06
Yes	4870-0013-0024	0.72	0.54
Yes	4870-0015-0016	0.01	0.01
Yes	4870-0021-0001	0.62	0.46

Yes	4880-0032-0052	0.01	0.01
Yes	4880-0032-0070	0.01	0.01
	4880-0034-0001	0.94	0.71
	4880-0034-0010	0.73	0.55
Yes	4880-0034-0019	0.69	0.51
Yes	4880-0034-0027	0.75	0.56
Yes	4880-0034-0035	0.51	0.39
Yes	4880-0034-0042	0.7	0.53
Yes	4880-0034-0048	0.57	0.43
Yes	4880-0034-0054	0.22	0.17
Yes	4880-0034-0059	0.23	0.17
Yes	4880-0034-0069	0.98	0.74
	4880-0034-0071	0.96	0.72

	4880-0034-0077	0.77	0.58
	4880-0042-0054	0.02	0.01
Yes	4880-0042-0057	0.04	0.03
	4880-0042-0062	0.11	0.08
Yes	~~4880-0042-0081~~		
	4880-0044-0070	-	-
	4880-0044-0073	-	-
Yes	4880-0044-0076	-	-
Yes	4880-0046-0017	0.36	0.24
Yes	4880-0046-0028	0.1	0.08
Yes	4880-0046-0042	0.09	0.07
Yes	4880-0048-0012	0.12	0.12
Yes	4932-0001-0001	0.02	0.01

Yes		**1.63**	**8.45**
Yes			
Yes			
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Yes

Kras, Kim

From: Barria, German
Sent: Wednesday, July 27, 2022 3:11 PM
To: Michelle Bublitz
Cc: James Burris; Bernoteit, Bob; Marr, Bill
Subject: RE: Waiver - Const.docx

Michelle, Jim

Thank you for providing the comments, we will do our best to review and implement what is possible.
However, some of the staff that need to decide on some items in the draft permit and placing it to notice are out of the Office, we may need possible a short term waiver.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Wednesday, July 27, 2022 12:37 PM
To: Barria, German <German.Barria@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German, please find attached Bunge's comments on the draft FESOP as well as a spreadsheet with our review and comments on appropriate emissions limits for facility sources and emission limit justification information. In addition to our comments included in the word document, please see the following comments:

- Bunge requests that the FESOP indicate that the conditions and limits in the FESOP (once issued) supersede conditions and limits in all previous construction and operating permits.
- The facility is a minor source of hazardous air pollutants
- The two plant boilers are capable of only burning natural gas. They were originally permitted to burn fuel oil and propane as backup but are not longer capable of burning those fuels.
- The proposed emissions limits for the boilers are based on a heat content higher than 1000 Btu/scf. Bunge suggests the limits should be based on a heat content of 1000 Btu/scf
- Remove references to specific filter/cyclone devices in the emission unit description. Replacement of filters/cyclones is exempt from permitted under 201.146(hhh). Would not want a new filter/cyclone to not match what is listed in the permit.
- Bunge's proposed emission limits are based on grain loading factors that are achievable and can be demonstrated. The justification for the grain loading values used to calculate "FESOP PTE" is included on the attached document "Grain Loading-Emission Limit Documentation".
- A comparison of emission unit information and emission limit information in the draft and Bunge's proposed descriptions and limits is attached. A couple of things to note

  - Bunge left this in excel form for each of copying and pasting
  - Columns B-I contain information from the FESOP draft.
  - Columns J, K, and Y-AE were for Bunge's internal comparison purposes
  - Bunge believes that the following information should be used to replace the information in the current draft
    - Columns M, N, P, Q, R, S, T-W
- Bunge strongly requests that IEPA remove the requirement to stack test all of the processing sources at the location within 90 days of permit issuance. This facility has roughly 135 sources that IEPA is proposing to require stack testing within 90 days of permit issuance and then again every 5 years. This is an incredibly onerous requirement and in many cases is not feasible.
  - Bunge is proposing emission limits that are based on reasonable grain loading rates from filters and cyclones.
  - These limits are achievable by well operated and maintained equipment.
  - Many of the sources are in areas that can not accommodate stack testing equipment
  - Many of the sources are not intended to operate in a manner that accommodates stack testing
    - Filter that only operate for a short time during material conveying
    - Bin vent filters

Sincerely,

Michelle

Michelle Bublitz
Environmental Director

Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 20, 2022 3:22 PM
To: James Burris <James.Burris@bunge.com>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Waiver - Const.docx

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Hello Jim,

I was told that we will need another waiver, the first of August is coming quick, and although we can put the requirement for a fugitive dust plan in the FESOP of within 90 days of issuance of the FESOP,
We still need comments on the draft permit, or a statement that indicates that it is ok to move forward with the draft as is. It is my understanding that there was an inspection recently, we will need to wait for the field inspection report.
I will say another waiver until September 1, hopefully we can moved the permits sometime during the month of august though.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Thursday, July 7, 2022 7:47 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German,

Attached is a pdf copy of the signed 90-day waiver letter. It is also being sent via registered mail.

Let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, July 5, 2022 1:57 PM
To: James Burris <James.Burris@bunge.com>
Subject: FW: Waiver - Const.docx

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I resending you the template waiver letter.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Barria, German
Sent: Wednesday, June 22, 2022 2:41 PM
To: James Burris <James.Burris@bunge.com>
Subject: Waiver - Const.docx

Attached is what we will ask a waiver of the 90-days

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Barria, German

From: Barria, German
Sent: Friday, July 29, 2022 11:44 AM
To: Michelle Bublitz
Cc: James Burris; Bernoteit, Bob; Marr, Bill
Subject: RE: Waiver - Const.docx

Michelle,

The prosed PM and PM10 limits are way higher than originally stated in the FESOP. That will cause that the record keeping be weekly or even daily.

Total	PM	PM10
PTE	160.02	95.39

We also had PM/PM10 limits that were below the 100 tons, the proposed changes splits the PM and PM10, I will have to wait till next week for some answer on how to approach some of the comments and changes to the draft permit.

Thanks

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 29, 2022 10:27 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: [External] RE: Waiver - Const.docx

Thank you German, please reach out if you have questions about the comments.

Here is a waiver until Friday, August 5.

Thanks
Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/

1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 27, 2022 3:11 PM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Cc: James Burris <James.Burris@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: RE: Waiver - Const.docx

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Michelle, Jim

Thank you for providing the comments, we will do our best to review and implement what is possible.
However, some of the staff that need to decide on some items in the draft permit and placing it to notice are out of the Office, we may need possible a short term waiver.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Wednesday, July 27, 2022 12:37 PM
To: Barria, German <German.Barria@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German, please find attached Bunge's comments on the draft FESOP as well as a spreadsheet with our review and comments on appropriate emissions limits for facility sources and emission limit justification information. In addition to our comments included in the word document, please see the following comments:

- Bunge requests that the FESOP indicate that the conditions and limits in the FESOP (once issued) supersede conditions and limits in all previous construction and operating permits.
- The facility is a minor source of hazardous air pollutants
- The two plant boilers are capable of only burning natural gas. They were originally permitted to burn fuel oil and propane as backup but are not longer capable of burning those fuels.
- The proposed emissions limits for the boilers are based on a heat content higher than 1000 Btu/scf. Bunge suggests the limits should be based on a heat content of 1000 Btu/scf

- Remove references to specific filter/cyclone devices in the emission unit description. Replacement of filters/cyclones is exempt from permitted under 201.146(hhh). Would not want a new filter/cyclone to not match what is listed in the permit.
- Bunge's proposed emission limits are based on grain loading factors that are achievable and can be demonstrated. The justification for the grain loading values used to calculate "FESOP PTE" is included on the attached document "Grain Loading-Emission Limit Documentation".
- A comparison of emission unit information and emission limit information in the draft and Bunge's proposed descriptions and limits is attached. A couple of things to note
    - Bunge left this in excel form for each of copying and pasting
    - Columns B-I contain information from the FESOP draft.
    - Columns J, K, and Y-AE were for Bunge's internal comparison purposes
    - Bunge believes that the following information should be used to replace the information in the current draft
        - Columns M, N, P, Q, R, S, T-W
- Bunge strongly requests that IEPA remove the requirement to stack test all of the processing sources at the location within 90 days of permit issuance. This facility has roughly 135 sources that IEPA is proposing to require stack testing within 90 days of permit issuance and then again every 5 years. This is an incredibly onerous requirement and in many cases is not feasible.
    - Bunge is proposing emission limits that are based on reasonable grain loading rates from filters and cyclones.
    - These limits are achievable by well operated and maintained equipment.
    - Many of the sources are in areas that can not accommodate stack testing equipment
    - Many of the sources are not intended to operate in a manner that accommodates stack testing
        - Filter that only operate for a short time during material conveying
        - Bin vent filters

Sincerely,

Michelle

Michelle Bublitz
Environmental Director

Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 20, 2022 3:22 PM
To: James Burris <James.Burris@bunge.com>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Waiver - Const.docx

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Hello Jim,

I was told that we will need another waiver, the first of August is coming quick, and although we can put the requirement for a fugitive dust plan in the FESOP of within 90 days of issuance of the FESOP,
We still need comments on the draft permit, or a statement that indicates that it is ok to move forward with the draft as is. It is my understanding that there was an inspection recently, we will need to wait for the field inspection report.
I will say another waiver until September 1, hopefully we can moved the permits sometime during the month of august though.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Thursday, July 7, 2022 7:47 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German,

Attached is a pdf copy of the signed 90-day waiver letter. It is also being sent via registered mail.

Let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, July 5, 2022 1:57 PM
To: James Burris <James.Burris@bunge.com>
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German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: Barria, German
Sent: Wednesday, June 22, 2022 2:41 PM
To: James Burris <James.Burris@bunge.com>
Subject: Waiver - Const.docx

Attached is what we will ask a waiver of the 90-days

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Kras, Kim

From: Barria, German
Sent: Monday, August 1, 2022 12:21 PM
To: Bernoteit, Bob
Subject: Bunge North America Inc - ID #183020ABT
Attachments: 96020027 - Bunge North America Inc - FESOP - 08-01-2022.docx

Bob,

This is the draft FESOP per their comments and prosed limits.
I haven't yet change the record keeping. Shall it be daily right.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit and D & E General Aspiration (5012-0004-0015) controlled by Baghouse Filters 37RF8; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemos Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
Bldg 105/115 General Aspiration (4880-0034-0027) controlled by Baghouse Filters DD 484RF12;
Bldg 102/105 General Aspiration (4880-0034-0001) controlled by Baghouse Filters MCF 144-756;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;

Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;

Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;

AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Germ Dust Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
FTS Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;

Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected

facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute

period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English

P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause

or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00

	Metric	English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency

of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility

including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

h. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

i. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(l).

j. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

k. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

l. The emission units described in Conditions 11(i), (j), and (k) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

m. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

n. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(l) and (m).

o. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(l) and (m) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)

Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04
Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg. 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North St Truck Dump Pit #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19

Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General Aspiration	0.002	0.0015	43,700	0.75	3.28	0.56	2.46
Bldg 102/105 General Aspiration	0.002	0.0015	55,000	0.94	4.13	0.71	3.10
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack & Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03

1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food Receiver	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02
300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04
#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
PCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08
Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79

Ingredient Bin 601	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 602	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 603	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 604	0.002	0.0015	210	0.004	0.02	0.003	0.01
Micro Ingredient Dump Aspiration	0.002	0.0015	2,500	0.04	0.19	0.03	0.14
Mixer General Aspiratior	0.002	0.0015	1,500	0.03	0.11	0.02	0.08
3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04
Viscosity Flour Receiver	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0	0.02	0	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grindinc	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kice Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.02
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	0.0200
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42
CCM260 Process Aspiration(S 105 Carter-Day)	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

i. Corn Mill Products Milling and Handling excluding the LTMS Truck/Rail Dump Pit and LTMS Truck Loadout:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52
Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

14a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s)

and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

15a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

17a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

18a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate

compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted on a quarterly basis no later than 30 days after the end of the preceding calendar quarter.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may

be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR

Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

20a. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The

record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 11(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

ix. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year); and

x. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 23(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

24. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

25. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance

or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

It should also be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

Kras, Kim

From: Barria, German
Sent: Monday, August 1, 2022 2:11 PM
To: Bernoteit, Bob
Subject: FW: Bunge North America Inc - ID #183020ABT
Attachments: 96020027 - Bunge North America Inc - FESOP - 08-01-2022.docx

this is last version.

German Barria
Environmental Protection Specialist.
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Barria, German
Sent: Monday, August 1, 2022 12:21 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America Inc - ID #183020ABT

Bob,

This is the draft FESOP per their comments and prosed limits.
I haven't yet change the record keeping. Shall it be daily right.

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit and D & E General Aspiration (5012-0004-0015) controlled by Baghouse Filters 37RF8; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemos Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
Bldg 105/115 General Aspiration (4880-0034-0027) controlled by Baghouse Filters DD 484RF12;
Bldg 102/105 General Aspiration (4880-0034-0001) controlled by Baghouse Filters MCF 144-756;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;

Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;

Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;

AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Germ Dust Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
FTS Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;

Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected

facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute

period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English

P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause

or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency

of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility

including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

h. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

i. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(l).

j. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

k. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

l. The emission units described in Conditions 11(i), (j), and (k) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

m. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

n. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(l) and (m).

o. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(l) and (m) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)

Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04
Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg. 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North St Truck Dump Pit #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19
Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73

West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General Aspiration	0.002	0.0015	43,700	0.75	3.28	0.56	2.46
Bldg 102/105 General Aspiration	0.002	0.0015	55,000	0.94	4.13	0.71	3.10
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack & Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03

Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food Receiver	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02
300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04
#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
PCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08
Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
Ingredient Bin 601	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 602	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 603	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 604	0.002	0.0015	210	0.004	0.02	0.003	0.01

Micro Ingredient Dump Aspiration	0.002	0.0015	2,500	0.04	0.19	0.03	0.14
Mixer General Aspiratior	0.002	0.0015	1,500	0.03	0.11	0.02	0.08
3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04
Viscosity Flour Receiver	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0	0.02	0	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grinding	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kice Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.02
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	0.0200
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42
CCM260 Process Aspiration(S 105 Carter-Day)	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	EMISSIONS PM (Tons/Yr)	EMISSIONS PM_{10} (lbs/Hr)	EMISSIONS PM_{10} (Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	EMISSIONS PM (Tons/Yr)	EMISSIONS PM_{10} (lbs/Hr)	EMISSIONS PM_{10} (Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52

Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

g. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

ii. Emissions from the combustion of natural gas:

		Emissions	
Pollutant	(lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

14a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be

accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

15a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at

least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

17a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the

discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

18a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted on a quarterly basis no later than 30 days after the end of the preceding calendar quarter.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill

Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be

representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

20a. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for

this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 11(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/month and hours/year);

viii. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

ix. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year); and

x. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 23(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

24. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

25. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air

Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

It should also be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

Kras, Kim

From: Bernoteit, Bob
Sent: Monday, August 1, 2022 3:11 PM
To: Barria, German
Subject: RE: Bunge North America Inc - ID #183020ABT

Yes, daily if limits are above 95% of the threshold.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Monday, August 1, 2022 12:21 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America Inc - ID #183020ABT

Bob,

This is the draft FESOP per their comments and prosed limits.
I haven't yet change the record keeping. Shall it be daily right.

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

Kras, Kim

From: Barria, German
Sent: Thursday, August 4, 2022 12:03 PM
To: Nation, Trent
Subject: 96020027 - Bunge North America Inc - FESOP - 08-04-2022.docx
Attachments: 96020027 - Bunge North America Inc - FESOP - 08-04-2022.docx

Prepare this FESOP for notice

Thank you.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit and D & E General Aspiration (5012-0004-0015) controlled by Baghouse Filters 37RF8; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemos Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
Bldg 105/115 General Aspiration (4880-0034-0027) controlled by Baghouse Filters DD 484RF12;
Bldg 102/105 General Aspiration (4880-0034-0001) controlled by Baghouse Filters MCF 144-756;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;

Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;

Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;

AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Germ Dust Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-Q003) controlled by DAY CYCLONE HV56;
FTS Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;

Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60. 300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected

facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute

period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English

P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause

or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency

of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility

including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

h. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

i. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(l).

j. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

k. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

l. The emission units described in Conditions 11(i), (j), and (k) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

m. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

n. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(l) and (m).

o. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(l) and (m) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)

Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04
Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg. 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North St Truck Dump Pit #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19
Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General Aspiration	0.002	0.0015	43,700	0.75	3.28	0.56	2.46
Bldg 102/105 General Aspiration	0.002	0.0015	55,000	0.94	4.13	0.71	3.10
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack & Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food Receiver	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02
300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04
#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
PCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08
Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
Ingredient Bin 601	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 602	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 603	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 604	0.002	0.0015	210	0.004	0.02	0.003	0.01
Micro Ingredient Dump Aspiration	0.002	0.0015	2,500	0.04	0.19	0.03	0.14
Mixer General Aspiratior	0.002	0.0015	1,500	0.03	0.11	0.02	0.08
3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04
Viscosity Flour Receive:	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0	0.02	0	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grindinc	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kice Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.02
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	0.0200
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42
CCM260 Process	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Aspiration(S 105 Carter-Day)							
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Compliance with the annual limits in Conditions 12(a) through 12(e) of this permit shall be determined on a daily basis from the sum of the data for the current day plus the preceding 364 days (running 365 days total).

g. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52
Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

h. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

i. Compliance with the annual limits in Condition 12(g) and (h) of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a

result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

14a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to

operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

15a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide,

without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

17a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

18a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning

and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted on a quarterly basis no later than 30 days after the end of the preceding calendar quarter.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled,

but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

20a. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source

category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 11(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/day and hours/year);

viii. Daily and annual emissions of PM, and PM_{10} from the source with supporting calculations (tons/month and tons/year).

ix. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

x. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year); and

xi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the combustion of natural gas, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 23(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

24. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

25. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the

initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

i. Via mail or overnight delivery:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. and electronically:

epa.boa.smu@illinois.gov

It should be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i) and the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3)

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

Kras, Kim

From: Nation, Trent
Sent: Thursday, August 4, 2022 2:32 PM
To: Barria, German
Subject: RE: 96020027 - Bunge North America Inc - FESOP - 08-04-2022.docx
Attachments: 96020027.doc

This is done and printed.

From: Barria, German <German.Barria@Illinois.gov>
Sent: Thursday, August 4, 2022 12:03 PM
To: Nation, Trent <Trent.Nation@Illinois.gov>
Subject: 96020027 - Bunge North America Inc - FESOP - 08-04-2022.docx

Prepare this FESOP for notice

Thank you.

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit and D & E General Aspiration (5012-0004-0015) controlled by Baghouse Filters 37RF8; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemos Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
Bldg 105/115 General Aspiration (4880-0034-0027) controlled by Baghouse Filters DD 484RF12;
Bldg 102/105 General Aspiration (4880-0034-0001) controlled by Baghouse Filters MCF 144-756;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;

Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;

Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;

AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Germ Dust Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
FTS Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

<u>Corn Mill Products Storage:</u>
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

<u>Corn Mill Products Milling and Handling:</u>
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;

Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60.300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected

facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute

period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause

or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency

of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner

consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

h. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

i. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(l).

j. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

k. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

l. The emission units described in Conditions 11(i), (j), and (k) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

m. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

n. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(l) and (m).

o. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(l) and (m) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04

Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg. 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North St Truck Dump Pit #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19
Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General	0.002	0.0015	43,700	0.75	3.28	0.56	2.46

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Aspiration							
Bldg 102/105 General Aspiration	0.002	0.0015	55,000	0.94	4.13	0.71	3.10
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack & Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food Receiver	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02
300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04
#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
PCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08
Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
Ingredient Bin 601	0.002	0.0015	210	0.004	0.02	0.003	0.01

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Ingredient Bin 602	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 603	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 604	0.002	0.0015	210	0.004	0.02	0.003	0.01
Micro Ingredient Dump Aspiration	0.002	0.0015	2,500	0.04	0.19	0.03	0.14
Mixer General Aspiration	0.002	0.0015	1,500	0.03	0.11	0.02	0.08
3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04
Viscosity Flour Receiver	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0	0.02	0	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grinding	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kice Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.02
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	0.0200
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42
CCM260 Process Aspiration(S 105 Carter-Day)	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Compliance with the annual limits in Conditions 12(a) through 12(e) of this permit shall be determined on a daily basis from the sum of the data for the current day plus the preceding 364 days (running 365 days total).

g. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52
Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

h. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

i. Compliance with the annual limits in Condition 12(g) and (h) of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

14a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the

rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

15a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60

or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

17a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

18a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are

representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted on a quarterly basis no later than 30 days after the end of the preceding calendar quarter.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of

testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:
A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring

device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

20a. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its

operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 11(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/day and hours/year);

viii. Daily and annual emissions of PM, and PM_{10} from the source with supporting calculations (tons/month and tons/year).

ix. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

x. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year); and

xi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the combustion of natural gas, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 23(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

24. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

25. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty

(30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

i. Via mail or overnight delivery:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. and electronically:

epa.boa.smu@illinois.gov

It should be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i) and the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3)

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

Kras, Kim

From: Barria, German
Sent: Friday, August 5, 2022 8:17 AM
To: Bernoteit, Bob; Marr, Bill
Subject: FW: Waiver - Const.docx

Should I said we are moving forward with notice and issuance of the construction permit.

German Barria
Environmental Protection Specialist.
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, August 5, 2022 6:44 AM
To: Barria, German <German.Barria@Illinois.gov>
Subject: [External] RE: Waiver - Const.docx

Good morning German, checking on the status of your review of the FESOP.

Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Friday, July 29, 2022 11:44 AM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Cc: James Burris <James.Burris@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: RE: Waiver - Const.docx

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Michelle,

The prosed PM and PM10 limits are way higher than originally stated in the FESOP. That will cause that the record keeping be weekly or even daily.

Total	PM	PM10
PTE	160.02	95.39

We also had PM/PM10 limits that were below the 100 tons, the proposed changes splits the PM and PM10, I will have to wait till next week for some answer on how to approach some of the comments and changes to the draft permit.

Thanks

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 29, 2022 10:27 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: [External] RE: Waiver - Const.docx

Thank you German, please reach out if you have questions about the comments.

Here is a waiver until Friday, August 5.

Thanks
Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385
BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 27, 2022 3:11 PM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Cc: James Burris <James.Burris@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Marr, Bill

<Bill.Marr@illinois.gov>
Subject: RE: Waiver - Const.docx

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Michelle, Jim

Thank you for providing the comments, we will do our best to review and implement what is possible.
However, some of the staff that need to decide on some items in the draft permit and placing it to notice are out of the Office, we may need possible a short term waiver.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Wednesday, July 27, 2022 12:37 PM
To: Barria, German <German.Barria@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Waiver - Const.docx

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Sincerely,

Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385
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Sent: Friday, August 5, 2022 6:44 AM
To: Barria, German <German.Barria@Illinois.gov>
Subject: [External] RE: Waiver - Const.docx

Good morning German, checking on the status of your review of the FESOP.

Michelle

Michelle Bublitz
Environmental Director

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Subject: Waiver - Const.docx

Attached is what we will ask a waiver of the 90-days

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Kras, Kim

From:	Barria, German
Sent:	Friday, August 5, 2022 9:02 AM
To:	Metz, Cassandra
Cc:	Bernoteit, Bob; Marr, Bill; Frost, Brad
Subject:	Bunge Milling, Inc. - ID #183020ABT
Attachments:	96020027 DRAFT 22-08-04.doc; 96020027 - Bunge North America Inc. (Project Summary) - 08-02-2022.docx

Cassie,

Please place the attached FESOP (permit number 96020027) in public notice.

Thank you

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
1021 N. Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

Project Summary
Proposed Federally Enforceable State Operating Permit (FESOP)
Bunge North America, Inc.
Danville, Vermilion County, Illinois

Site Identification No.: 183020ABT
Application No.: 96020027

Schedule
Public Comment Period Begins:
Public Comment Period Closes:

Illinois EPA Contacts
Permit Analyst: German Barria
Community Relations Coordinator: Brad Frost
217/782-7027
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I. INTRODUCTION

Bunge North America, Inc. has applied for a Federally Enforceable State Operating Permit (FESOP) for its plant located at 321 E. North Street in Danville. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the renewed permit that it would propose to issue for the plant. However, before renewing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

II. SOURCE DESCRIPTION

Bunge North America, Inc. is a corn mill and grain elevator. The emission units at this plant that require an operating permit are shown in Table 1, below.

Table 1. Listing of Non-Exempt Emission Units Located at the Source.

Emission Unit and Description	Construction Date (and Date Last Modified)
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):	
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10	Prior to 1978
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96	Prior to 1970
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12	Prior to 1978
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12	Prior to 1978
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96	Prior to 1970
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30	Prior to 1978
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):	
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12	1985
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12	1996
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12	1996
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12	Prior to 1978

Emission Unit and Description	Construction Date (and Date Last Modified)
Dry Corn Milling, Processing and Products Handling:	
Bemos Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8	1996
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8	1996
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8	1996
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8	1996
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8	1996
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10	1996
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8	1996
Bldg 105/115 General Aspiration (4880-0034-0027) controlled by Baghouse Filters DD 484RF12	1996
Bldg 102/105 General Aspiration (4880-0034-0001) controlled by Baghouse Filters MCF 144-756	1996
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96	1996
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12	1996
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A	1996
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30	1996
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12	1996
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12	1996
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12	1996
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12	1996
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12	1996
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12	1996
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12	1996
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002	1996
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D	1996
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4	Prior to 1970
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100	1996
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100	1996
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4	1996
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4	1996
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220	1996
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220	1996
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8	1996
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4	1996
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4	1996
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4	1996
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4	1996
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8	1996
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7	1996
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6	1996
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100	1996
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B	1996
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1	1996
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4	1996
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10	1996
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8	1996
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8	1996
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8	1996
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8	1996
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B	1996
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220	1996
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220	1996
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6	1996
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30	1996
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30	1996
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30	1996
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20	1996
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6	1996
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220	1996
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1	1996
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220	1996
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120	1996
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4	1996
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4	1996
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10	1996
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B	1996
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4	1996
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4	1996
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30	1996
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6	1996
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6	1996
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10	1996
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220	1996
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B	1996
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30	1996
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8	1996
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8	1996
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96	1996
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220	1996
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12	1996
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2	Prior to 1970
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8	Prior to 1970
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone	Prior to 1970
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7	1982
Germ Dust Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8	Prior to 1970
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8	Prior to 1970
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56	Prior to 1970
FTS Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE	Prior to 1970

Emission Unit and Description	Construction Date (and Date Last Modified)
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL	1995
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30	Prior to 1970
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter)	2015
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260)	2016
PCM Hammermill controlled by Filter System (78-03:11)	2018
USG Hammermill controlled by Filter System (78-03:27)	2018
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22)	2018
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86)	
Corn Mill Products Storage:	
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96	Prior to 1970
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96	Prior to 1970
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12	Prior to 1970
Corn Mill Products Milling and Handling:	

Emission Unit and Description	Construction Date (and Date Last Modified)
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8	Prior to 1970
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4	Prior to 1970
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8	1980
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12	1981
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8	1985
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416	1985
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20	Prior to 1970
Boiler House/Grounds:	
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NO_x Burner (Boiler #1)	1986
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler)	2010

These units are sources of emissions because Particulate Matter (PM) and Particulate Matter less than 10 microns (PM_{10}) is generated from the receiving, handling, and milling of grain at the facility. This source is also a source of Carbon Monoxide (CO) and Nitrogen Oxides (NO_x) from the combustion of fuel in the boilers and generator at this facility. NO_x is formed thermally by the combination of oxygen and nitrogen in the air at the temperatures at which fuel is burned. Thermal NO_x is formed during all common high temperature combustion processes. CO is formed from incomplete combustion of the fuel.

The following table lists annual emissions (tons) of pollutants emitted from this source, as reported in the last three Annual Emission Reports (AER) sent to the Illinois EPA:

Table 2. Actual and Potential (as limited by permit) Emissions of the Source.

Pollutant	Actual Emissions 2019 (tons)	Actual Emissions 2020 (tons)	Actual Emissions 2021 (tons)	PTE as limited by permit (tons/year)
Carbon Monoxide (CO)	16.3400	17.3000	16.5400	45.78
Nitrogen Oxides (NO_x)	11.6000	11.9000	10.7000	33.36
Particulate Matter (PM)	65.8000	65.5000	59.7000	160.02
Particulate Matter less than 10 Microns (PM_{10})	28.0000	32.9000	31.3000	95.39
Sulfur Dioxide (SO_2)	0.1100	0.1300	0.1200	0.32
Volatile Organic Material (VOM)	1.1700	1.5800	1.4000	3.00

This source also contains emission units and activities that are exempt from permitting under 35 Ill. Adm. Code 201.146 and the emissions from such units are not limited by the conditions of the draft permit. These emission units include:

Two (2) 193 Diesel Fire-Pump Engines
150,000 gallon fuel oil storage tank

Based on a review of the estimated potential emissions from the exempt emission units as included in the permit application, the Illinois EPA has determined that the emissions from such exempt emission units are trivial and will not contribute to this source being a major source of emissions for any regulated pollutants emitted from any such exempt emission unit. This is because the emission limits for CO, NO_x, and PM_{10} in the draft FESOP are 90% or less of the applicable major source thresholds, and the combined PTE of the exempt emission units are less than 5% of the applicable major source thresholds, In other words, the emission limits for CO, NO_x, and PM_{10} have been limited to 90% or less of the applicable threshold (or 100 tons/year) by the draft FESOP and the combined potential to emit of the CO, NO_x, and PM_{10} from the exempt units is estimated to be less than 5% of 100 tons/year. In addition, as shown in Table 2, above, the margin of compliance between the actual emissions reported by the source during the last three years and the potential emissions as limited in the draft FESOP is more than 63% for CO, 65% for NO_x, and 67% for PM_{10}, which further minimizes the likelihood of the source exceeding its permit limits or the applicable major source thresholds.

In cases where the potential emissions of exempt emission units may contribute to the source exceeding major source thresholds (for example, if the emission limits in the FESOP are 90% or more of the applicable major source thresholds and the exempt units' PTE is 5% or more of the threshold) the Illinois EPA has established limits on such emission units in the draft FESOP that would normally be exempt from permitting. The permitting exemptions in 35 Ill. Adm. Code 201.146 do not relieve the owner or operator of any source from any obligation to comply with any other applicable requirements.

III. GENERAL DISCUSSION

FESOPs are federally enforceable, that is, the terms and conditions of the permits can be enforced by the United States Environmental Protection Agency (USEPA) under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source may operate this plant under a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need to obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for CO, NO_x, and PM_{10}. The potential emissions of other pollutants (e.g., SO_2, VOM, and Hazardous Air Pollutants) from the plant are small enough that no restrictions are needed to avoid being a major source of these pollutants.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board (Board). These emission standards represent the basic requirements for sources in Illinois. The Board has specific standards for particulate matter under 35 Ill. Adm. Code Part 212. The processing and milling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions), which limits the opacity of emissions to 30 percent, and 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units), which limits PM emissions based on each units process weight rate. The receipt and handling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions) and 35 Ill. Adm. Code Part 212 Subpart S (Agriculture), which requires the source to implement and use certain housekeeping practices to reduce particulate matter emissions and to equip the sources receiving dump pits with air pollution control equipment that is capable of at least 90% collection efficiency for PM emissions. The boilers are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions).

The Clayton Boiler is at this source are subject to the New Source Performance Standards (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. The source also has another boiler that was constructed prior to June 9, 1989 and as result will not be subject the NSPS standards.

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) at this source are subject to the New Source Performance Standards (NSPS) for Grain Elevators, 40 CFR 60, Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. The source also has other grain receiving, cleaning and storage operations that were constructed prior to August 3, 1978 and as result will not be subject the NSPS standards.

The application shows that the plant is in compliance with applicable state and federal emission standards.

V. CONTENTS OF THE PERMIT

The permit that the Illinois EPA is proposing to issue will identify the specific emission standards that apply to the emission units at the plant. As explained, the processing and milling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B, which limits the opacity of emissions to 30 percent, and 35 Ill. Adm. Code Part 212 Subpart L, which limits PM emissions based on each units process weight rate. The receipt and handling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B and 35 Ill. Adm. Code Part 212 Subpart S, which requires the source to implement and use certain housekeeping practices to reduce particulate matter emissions and to equip the sources receiving dump pits with air pollution control equipment that is capable of at least 90% collection efficiency for PM emissions. The boilers are subject to 35 Ill. Adm. Code Part 212 Subpart B, which limits the opacity of emissions to 30 percent. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for CO, NO_x, and PM_{10}. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit would also set limitations on PM_{10} emissions based on the air flow to the baghouses and cyclones and the grain loading of these control devices determine by stack testing conducted at the source. The boilers are to be limited based on the types of fuel combusted and the amount of each fuel usage. These limitations are consistent with the historical operation of emission units at the plant.

The permit conditions would also continue to require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for issuance of its permit. The Illinois EPA is therefore proposing to issue the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12;
Railcar Dump Pit and D & E General Aspiration (5012-0004-0015) controlled by Baghouse Filters 37RF8; and
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12;
Corn Cleaning Bldg 115 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12;
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12;

Dry Corn Milling, Processing and Products Handling:

Bemos Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8;
Bldg 105/115 General Aspiration (4880-0034-0027) controlled by Baghouse Filters DD 484RF12;
Bldg 102/105 General Aspiration (4880-0034-0001) controlled by Baghouse Filters MCF 144-756;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A;
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12;
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12;
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D;
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4;

Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4;
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7;
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6;
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100;
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8;
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220;
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220;

Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30;
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30;
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20;
General Aspiration (4990-0006-0040) controlled by Baghouse Filters BUHLER 9-8-220;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6;
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4;
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10;
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B;
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B;
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6;
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10;
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96;

AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8;
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7;
Germ Dust Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8;
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56;
FTS Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filters MICROPUL;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260);
PCM Hammermill controlled by Filter System (78-03:11);
USG Hammermill controlled by Filter System (78-03:27);
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22);
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86);
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86);

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96;
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8;

Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12;
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60. 300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected

facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute

period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause

or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00'	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency

of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner

consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.

h. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

i. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(l).

j. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

k. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

l. The emission units described in Conditions 11(i), (j), and (k) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

m. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

n. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(l) and (m).

o. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(l) and (m) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04

Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg. 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North St Truck Dump Pit #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19
Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General	0.002	0.0015	43,700	0.75	3.28	0.56	2.46

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Aspiration Bldg 102/105 General Aspiration	0.002	0.0015	55,000	0.94	4.13	0.71	3.10
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack & Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food Receiver	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02
300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04
#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
PCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08
Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
Ingredient Bin 601	0.002	0.0015	210	0.004	0.02	0.003	0.01

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Ingredient Bin 602	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 603	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 604	0.002	0.0015	210	0.004	0.02	0.003	0.01
Micro Ingredient Dump Aspiration	0.002	0.0015	2,500	0.04	0.19	0.03	0.14
Mixer General Aspiratior	0.002	0.0015	1,500	0.03	0.11	0.02	0.08
3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04
Viscosity Flour Receiver	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0	0.02	0	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grinding	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kice Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.02
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	0.0200
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42
CCM260 Process Aspiration(S 105 Carter-Day)	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Compliance with the annual limits in Conditions 12(a) through 12(e) of this permit shall be determined on a daily basis from the sum of the data for the current day plus the preceding 364 days (running 365 days total).

g. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52
Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

h. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

i. Compliance with the annual limits in Condition 12(g) and (h) of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

14a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the

rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

15a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60

or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

17a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

18a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are

representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted on a quarterly basis no later than 30 days after the end of the preceding calendar quarter.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of

testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:
A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring

device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

20a. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its

operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 11(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/day and hours/year);

viii. Daily and annual emissions of PM, and PM_{10} from the source with supporting calculations (tons/month and tons/year).

ix. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

x. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year); and

xi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the combustion of natural gas, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 23(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

24. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

25. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty

(30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

i. Via mail or overnight delivery:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. and electronically:

epa.boa.smu@illinois.gov

It should be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i) and the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3)

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

Kras, Kim

From: Metz, Cassandra
Sent: Friday, August 5, 2022 9:18 AM
To: Barria, German
Subject: RE: Bunge Milling, Inc. - ID #183020ABT
Attachments: PN New FESOP.docx

Please review

From: Barria, German <German.Barria@Illinois.gov>
Sent: Friday, August 5, 2022 9:02 AM
To: Metz, Cassandra <Cassandra.Metz@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>; Frost, Brad <Brad.Frost@Illinois.gov>
Subject: Bunge Milling, Inc. - ID #183020ABT

Cassie,

Please place the attached FESOP (permit number 96020027) in public notice.

Thank you

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

Illinois Environmental Protection Agency

Public Notice
Proposed Issuance of a Federally Enforceable State Operating Permit
Bunge North America, Inc. in Danville

Bunge North America, Inc. has applied to the Illinois Environmental Protection Agency for a federally enforceable state operating permit (FESOP) regulating air emissions from the facility, which is located at 321 East North Street in Danville. The source is a corn mill and grain elevator. The Illinois EPA has reviewed the application and made a preliminary determination that the application meets the standards for issuance and has prepared a draft permit for public review and comment.

The Illinois EPA is accepting written comments on the draft permit. Comments must be received by 11:59 PM on September 4, 2022. If sufficient interest is expressed in the draft permit, a hearing or other informational meeting may be held. Requests for information, comments, and questions should be directed to Cassandra Metz, Office of Community Relations, Illinois Environmental Protection Agency, PO Box 19506, Springfield, Illinois, 62794-9506, phone 217/785-7491, TDD phone number 866/273-5488, Cassandra.Metz@Illinois.gov.

The repositories for these documents and the application will be made available at the Illinois EPA's offices at 2125 South First Street in Champaign, 217/278-5800 and 1021 North Grand Avenue East, Springfield, 217/785-7491 (please call ahead to assure that someone will be available to assist you). The draft permit and other documents may also be available at http://bit.ly/2SiUSql. Copies of the documents may also be obtained upon request to the contact listed above.

The facility is located in an area of Environmental Justice concern. More information concerning Environmental Justice may be found at https://www2.illinois.gov/epa/topics/environmental-justice/Pages/default.aspx.

The 1990 amendments to the Clean Air Act require potentially major sources of air emissions to obtain federally enforceable operating permits. A FESOP permit allows a source that is potentially major to take operational limits in the permit so that it is a non-major source. The permit will contain federally enforceable limitations that restrict the facility's emissions to non-major levels. The permit will be enforceable by the U.S. EPA, as well as the Illinois EPA.

Kras, Kim

From: Barria, German
Sent: Friday, August 5, 2022 9:24 AM
To: Metz, Cassandra
Subject: RE: Bunge Milling, Inc. - ID #183020ABT
Attachments: PN New FESOP.docx

Just changed the name to: Bunge Milling, Inc.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: Metz, Cassandra <Cassandra.Metz@Illinois.gov>
Sent: Friday, August 5, 2022 9:18 AM
To: Barria, German <German.Barria@Illinois.gov>
Subject: RE: Bunge Milling, Inc. - ID #183020ABT

Please review

From: Barria, German <German.Barria@Illinois.gov>
Sent: Friday, August 5, 2022 9:02 AM
To: Metz, Cassandra <Cassandra.Metz@Illinois.gov>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>; Frost, Brad <Brad.Frost@Illinois.gov>
Subject: Bunge Milling, Inc. - ID #183020ABT

Cassie,

Please place the attached FESOP (permit number 96020027) in public notice.

Thank you

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

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Illinois Environmental Protection Agency

Public Notice
Proposed Issuance of a Federally Enforceable State Operating Permit
Bunge ~~North America~~Milling, Inc. in Danville

Bunge ~~North America~~Milling, Inc. has applied to the Illinois Environmental Protection Agency for a federally enforceable state operating permit (FESOP) regulating air emissions from the facility, which is located at 321 East North Street in Danville. The source is a corn mill and grain elevator. The Illinois EPA has reviewed the application and made a preliminary determination that the application meets the standards for issuance and has prepared a draft permit for public review and comment.

The Illinois EPA is accepting written comments on the draft permit. Comments must be received by 11:59 PM on September 4, 2022. If sufficient interest is expressed in the draft permit, a hearing or other informational meeting may be held. Requests for information, comments, and questions should be directed to Cassandra Metz, Office of Community Relations, Illinois Environmental Protection Agency, PO Box 19506, Springfield, Illinois, 62794-9506, phone 217/785-7491, TDD phone number 866/273-5488, Cassandra.Metz@Illinois.gov.

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The 1990 amendments to the Clean Air Act require potentially major sources of air emissions to obtain federally enforceable operating permits. A FESOP permit allows a source that is potentially major to take operational limits in the permit so that it is a non-major source. The permit will contain federally enforceable limitations that restrict the facility's emissions to non-major levels. The permit will be enforceable by the U.S. EPA, as well as the Illinois EPA.

Kras, Kim

From: Metz, Cassandra
Sent: Friday, August 5, 2022 9:42 AM
To: Chris Kjellmark; Hart, Kristin L - DNR; J Brush; john.finke@nashville.gov; Kendall Hale; Morse, James (EEC); Rex Lane
Cc: Frost, Brad
Subject: Bunge Milling Inc. 183020ABT 95020027
Attachments: PN New FESOP.pdf

Bunge Milling, Inc. in Danville has applied for a Draft new FESOP permit. Attached is the public notice. The Illinois EPA will accept public comments from 08/05/2022 to 09/04/2022. The draft permit and other documents are available on our website http://bit.ly/2SiUSql.

ID No.: 183020ABT
Permit No.: 95020027
Source: Bunge Milling, Inc.

Cassandra Metz
Community Relations Coordinator
Associate Director's Office
(217)785-7491

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Illinois Environmental Protection Agency

Public Notice
Proposed Issuance of a Federally Enforceable State Operating Permit
Bunge Milling, Inc. in Danville

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Kras, Kim

From: Barria, German
Sent: Friday, August 5, 2022 10:09 AM
To: Bernoteit, Bob; Marr, Bill
Subject: FW: Bunge Milling Inc. 183020ABT 95020027
Attachments: PN New FESOP.pdf

Here it go

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: Metz, Cassandra <Cassandra.Metz@Illinois.gov>
Sent: Friday, August 5, 2022 9:42 AM
To: Chris Kjellmark <chris.kjellmark@dnr.iowa.gov>; Hart, Kristin L - DNR <Kristin.Hart@wisconsin.gov>; J Brush <JBRUSH@idem.in.gov>; john.finke@nashville.gov; Kendall Hale <kendall.hale@dnr.mo.gov>; Morse, James (EEC) <James.Morse@ky.gov>; Rex Lane <laner@michigan.gov>
Cc: Frost, Brad <Brad.Frost@Illinois.gov>
Subject: Bunge Milling Inc. 183020ABT 95020027

Bunge Milling, Inc. in Danville has applied for a Draft new FESOP permit. Attached is the public notice. The Illinois EPA will accept public comments from 08/05/2022 to 09/04/2022. The draft permit and other documents are available on our website http://bit.ly/2SiUSql.

ID No.: 183020ABT
Permit No.: 95020027
Source: Bunge Milling, Inc.

Cassandra Metz
Community Relations Coordinator
Associate Director's Office
(217)785-7491

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Illinois Environmental Protection Agency

Public Notice
Proposed Issuance of a Federally Enforceable State Operating Permit
Bunge Milling, Inc. in Danville

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Kras, Kim

From: Barria, German
Sent: Friday, August 5, 2022 1:30 PM
To: Michelle Bublitz
Subject: RE: Waiver - Const.docx
Attachments: 22040008 Bunge Milling, Inc..pdf

It takes some time for issued permit to make it there I believe.
Here you go

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, August 5, 2022 1:13 PM
To: Barria, German <German.Barria@Illinois.gov>
Subject: [External] RE: Waiver - Const.docx

Thank you German, could you please send me a copy of the signed, issued construction permit. I can't find it on IEPA's document explorer.

Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Friday, August 5, 2022 12:56 PM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Waiver - Const.docx

WARNING: The sender of this email could not be validated and may not match the person in the "From" field.

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Good afternoon Michelle,
The construction permit was issued today, the operating permit (FESOP) was place to notice today as well.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, August 5, 2022 6:44 AM
To: Barria, German <German.Barria@Illinois.gov>
Subject: [External] RE: Waiver - Const.docx

Good morning German, checking on the status of your review of the FESOP.

Michelle

Michelle Bublitz
Environmental Director

Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Friday, July 29, 2022 11:44 AM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Cc: James Burris <James.Burris@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: RE: Waiver - Const.docx

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Michelle,

The prosed PM and PM10 limits are way higher than originally stated in the FESOP. That will cause that the record keeping be weekly or even daily.

Total	PM	PM10
PTE	160.02	95.39

We also had PM/PM10 limits that were below the 100 tons, the proposed changes splits the PM and PM10, I will have to wait till next week for some answer on how to approach some of the comments and changes to the draft permit.

Thanks

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Friday, July 29, 2022 10:27 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: [External] RE: Waiver - Const.docx

Thank you German, please reach out if you have questions about the comments.

Here is a waiver until Friday, August 5.

Thanks
Michelle

Michelle Bublitz
Environmental Director
Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 27, 2022 3:11 PM
To: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Cc: James Burris <James.Burris@bunge.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>
Subject: RE: Waiver - Const.docx

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Michelle, Jim

Thank you for providing the comments, we will do our best to review and implement what is possible.
However, some of the staff that need to decide on some items in the draft permit and placing it to notice are out of the Office, we may need possible a short term waiver.

Thank you.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

From: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Sent: Wednesday, July 27, 2022 12:37 PM
To: Barria, German <German.Barria@Illinois.gov>
Cc: James Burris <James.Burris@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German, please find attached Bunge's comments on the draft FESOP as well as a spreadsheet with our review and comments on appropriate emissions limits for facility sources and emission limit justification information. In addition to our comments included in the word document, please see the following comments:

- Bunge requests that the FESOP indicate that the conditions and limits in the FESOP (once issued) supersede conditions and limits in all previous construction and operating permits.
- The facility is a minor source of hazardous air pollutants
- The two plant boilers are capable of only burning natural gas. They were originally permitted to burn fuel oil and propane as backup but are not longer capable of burning those fuels.
- The proposed emissions limits for the boilers are based on a heat content higher than 1000 Btu/scf. Bunge suggests the limits should be based on a heat content of 1000 Btu/scf
- Remove references to specific filter/cyclone devices in the emission unit description. Replacement of filters/cyclones is exempt from permitted under 201.146(hhh). Would not want a new filter/cyclone to not match what is listed in the permit.
- Bunge's proposed emission limits are based on grain loading factors that are achievable and can be demonstrated. The justification for the grain loading values used to calculate "FESOP PTE" is included on the attached document "Grain Loading-Emission Limit Documentation".
- A comparison of emission unit information and emission limit information in the draft and Bunge's proposed descriptions and limits is attached. A couple of things to note
    - Bunge left this in excel form for each of copying and pasting
    - Columns B-I contain information from the FESOP draft.
    - Columns J, K, and Y-AE were for Bunge's internal comparison purposes
    - Bunge believes that the following information should be used to replace the information in the current draft

    - Columns M, N, P, Q, R, S, T-W
- Bunge strongly requests that IEPA remove the requirement to stack test all of the processing sources at the location within 90 days of permit issuance. This facility has roughly 135 sources that IEPA is proposing to require stack testing within 90 days of permit issuance and then again every 5 years. This is an incredibly onerous requirement and in many cases is not feasible.
    - Bunge is proposing emission limits that are based on reasonable grain loading rates from filters and cyclones.
    - These limits are achievable by well operated and maintained equipment.
    - Many of the sources are in areas that can not accommodate stack testing equipment
    - Many of the sources are not intended to operate in a manner that accommodates stack testing
        - Filter that only operate for a short time during material conveying
        - Bin vent filters

Sincerely,

Michelle

Michelle Bublitz
Environmental Director

Phone: 314.292.2652 **Mobile:** 314.250.3056
bunge.com
Linkedin.com/in/michelle-bublitz/
1391 Timberlake Manor Parkway, Chesterfield, MO 63385

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, July 20, 2022 3:22 PM
To: James Burris <James.Burris@bunge.com>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: RE: Waiver - Const.docx

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

Hello Jim,

I was told that we will need another waiver, the first of August is coming quick, and although we can put the requirement for a fugitive dust plan in the FESOP of within 90 days of issuance of the FESOP,
We still need comments on the draft permit, or a statement that indicates that it is ok to move forward with the draft as is. It is my understanding that there was an inspection recently, we will need to wait for the field inspection report.
I will say another waiver until September 1, hopefully we can moved the permits sometime during the month of august though.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit

Phone: 217-785-0767

Illinois Environmental Protection Agency

From: James Burris <James.Burris@bunge.com>
Sent: Thursday, July 7, 2022 7:47 AM
To: Barria, German <German.Barria@Illinois.gov>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Waiver - Const.docx

German,

Attached is a pdf copy of the signed 90-day waiver letter. It is also being sent via registered mail.

Let me know if you have any questions.

Jim Burris, PE

Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

BUNGE

From: Barria, German <German.Barria@Illinois.gov>
Sent: Tuesday, July 5, 2022 1:57 PM
To: James Burris <James.Burris@bunge.com>
Subject: FW: Waiver - Const.docx

CAUTION: This email originated from outside of Bunge. Do not click links or open attachments unless you recognize the sender !

I resending you the template waiver letter.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental Protection Agency

From: Barria, German
Sent: Wednesday, June 22, 2022 2:41 PM
To: James Burris <James.Burris@bunge.com>
Subject: Waiver - Const.docx

Attached is what we will ask a waiver of the 90-days

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

Bunge North America, Inc.
Attn: Paul Catterson, Plant Manager
321 E. North Street
Danville, Illinois 61832

Application No.: 22040008 I.D. No.: 183020ABT
Applicant's Designation: Date Received: April 8, 2022
Subject: CCM260 Corn Meal System Upgrade
Date Issued: August 5, 2022
Location: 321 E. North Street, Danville, Vermilion County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of:

One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Degerminator Cyclone Collector (45:07) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #1 Satake Aspiration Cyclone Collector (45:12) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Degerminator Cyclone Collector (45:09) controlled by the S 105 Roof Carter-Day Filter (334:86);
One (1) #2 Satake Aspiration Cyclone Collector (45:24) controlled by the S 105 Roof Carter-Day Filter (334:86);
Additional (1,000 c£m) aspiration to provide negative pressure on Satake Sifter and Sifter Air Locks;
One (1) Satake Germinator Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by the existing 8th Floor Donaldson Filter (34:27); and
One (1) Pneumatic Meal Transfer Line and Cyclone Receiver (23:102) controlled by the existing West MAC Filter (34:01)

as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the construction of #1 Coarse Gravity Table Aspiration Cyclone Collector, #3 Fine Gravity Table Aspiration Cyclone Collector, #1 Satake Degerminator Cyclone Collector, #1 Satake Aspiration Cyclone Collector, #2 Satake Degerminator Cyclone Collector, #2 Satake Aspiration Cyclone Collector, additional (1,000 cfm) aspiration for Satake Sifter and Sifter Air Locks, Satake Germinator Pneumatic Transfer Line and Cyclone Receiver, and Pneumatic Meal Transfer Line and Cyclone Receiver not constituting a new major

source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 and 35 Ill. Adm. Code Part 204 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM) and Particulate Matter less than 10 microns (PM_{10}) from the above-listed equipment below the levels that would trigger the applicability of these rules.

b. Operation of the equipment listed above is allowed under this construction permit until final action is taken on the Federally Enforceable State Operating Permit (FESOP) application for this source.

c. The operation of the emission units under this construction permit shall not begin until construction of the associated pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation.

2a. The #1 Coarse Gravity Table Aspiration Cyclone Collector, #3 Fine Gravity Table Aspiration Cyclone Collector, #1 Satake Degerminator Cyclone Collector, #1 Satake Aspiration Cyclone Collector, #2 Satake Degerminator Cyclone Collector, #2 Satake Aspiration Cyclone Collector , Satake Sifter and Sifter Air Locks, Satake Germinator Pneumatic Transfer Line and Cyclone Receiver, and Pneumatic Meal Transfer Line and Cyclone Receiver are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The #1 Coarse Gravity Table Aspiration Cyclone Collector, #3 Fine Gravity Table Aspiration Cyclone Collector, #1 Satake Degerminator Cyclone Collector, #1 Satake Aspiration Cyclone Collector, #2 Satake Degerminator Cyclone Collector, #2 Satake Aspiration Cyclone Collector (45:24), Satake Sifter and Sifter Air Locks, Satake Germinator Pneumatic Transfer Line and Cyclone Receiver, and Pneumatic Meal

Transfer Line and Cyclone Receiver are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction of Modification Commenced On or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

3. This permit is issued based on the #1 Coarse Gravity Table Aspiration Cyclone Collector, #3 Fine Gravity Table Aspiration Cyclone Collector, #1 Satake Degerminator Cyclone Collector, #1 Satake Aspiration Cyclone Collector, #2 Satake Degerminator Cyclone Collector, #2 Satake Aspiration Cyclone Collector, Satake Sifter and Sifter Air Locks, Satake Germinator Pneumatic Transfer Line and Cyclone Receiver, and Pneumatic Meal Transfer Line and Cyclone Receiver at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because these emission units do not use a material containing chromium or a material containing manganese and are not primarily engaged in manufacturing of animal feed.

4. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

5a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to

minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

b. The filters shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the S 105 Roof Carter-Day filters associated with #1 Coarse Gravity Table Aspiration Cyclone Collector, #3 Fine Gravity Table Aspiration Cyclone Collector, #1 Satake Degerminator Cyclone Collector, #1 Satake Aspiration Cyclone Collector, #2 Satake Degerminator Cyclone Collector, #2 Satake Aspiration Cyclone Collector, Satake Sifter and Sifter Air Locks, Stake Germinator Pneumatic Transfer Line and Cyclone Receiver, and Pneumatic Meal Transfer Line and Cyclone Receiver such that the filter is kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

6a. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

	Grain Loading	Total Flow Rate	E M I S S I O N S PM & PM_{10}	
Emission Unit	(gr/dscf)	(dscfm)	(lbs/Hour)	(Tons/Yr)
S 105 Roof Carter-Day Filter	0.002	40,600	0.70	3.05

These limits are based on the maximum exhaust air flow rate, maximum grain loading, 100% capture efficiency, and 8,760 hours/year of operation.

b. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

7a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA

Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Condition 8 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

8. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

9. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

10a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the S 105 Roof Carter-Day Filter associated with #1 Coarse Gravity Table Aspiration Cyclone Collector, #3 Fine Gravity Table Aspiration Cyclone Collector, #1 Satake Degerminator Cyclone Collector, #1 Satake Aspiration Cyclone Collector, #2 Satake Degerminator Cyclone Collector, #2 Satake Aspiration Cyclone Collector, Satake Sifter and Sifter Air Locks, Satake Germinator Pneumatic Transfer Line and Cyclone Receiver, and Pneumatic Meal Transfer Line and Cyclone Receiver:

A. Records for periodic inspection of the filters with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. Total flow rate for each blower associated with the S 105 Roof Carter-Day Filter and the filters associated with the North Lunchroom Screening and South Lunchroom Screening (scfm);

iii. Total grain loading for each process (gr/dscf);

iv. The hours of operation for the S 105 Roof Carter-Day Filter; and

v. On a monthly basis maintain 12-month rolling PM and PM_{10} emissions from the S 105 Roof Carter-Day Filter with supporting calculations (tons/year).

b. All records and logs required by Condition 10(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspections and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

11. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

12a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

i. Via mail or overnight delivery:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. and electronically:

epa.boa.smu@illinois.gov

If you have any questions on this permit, please call German Barria at 217/785-1705.

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

   a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

   b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

   c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

   d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Kras, Kim

From: Metz, Cassandra
Sent: Wednesday, August 31, 2022 12:52 PM
To: James Burris
Subject: RE: Public Notice Permit - Comments

Good afternoon,

Thank you for your email. Comments may be emailed directly to me. People sometimes send their comments in the mail, but a hard copy is not required. Either on their own is acceptable. If you prefer to mail the comments, you may send it with attention to me, Cassandra Metz #5 at 1021 North Grand Avenue East, Springfield IL 62794. I will let the permit writer know you contacted me so that the permit is not issued without considering your comments.

Sincerely,

Cassandra Metz
Community Relations Coordinator
Associate Director's Office
(217)785-7491

From: James Burris <James.Burris@bunge.com>
Sent: Wednesday, August 31, 2022 11:40 AM
To: Metz, Cassandra <Cassandra.Metz@Illinois.gov>
Subject: [External] Public Notice Permit - Comments

Cassandra,

I would like to submit comments on a public noticed permit. I have a few questions on how to do this.

1) To what address and to whose attention should I send the comments?
2) The public notice information page says comments must be received by 11:59 PM on September 4, 2022. Can the comments be emailed to you to meet this deadline and mailed separately?
3) If a hard copy is required to be received by September 4 (Sunday), will someone be a the mailing address on Saturday or Sunday to receive a Fed Ex package?

Thank you for your assistance.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

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Kras, Kim

From: Barria, German
Sent: Wednesday, August 31, 2022 1:23 PM
To: Bernoteit, Bob
Subject: FW: Public Notice Permit - Comments

Fyi

German Barria
Environmental Protection Specialist.
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Metz, Cassandra <Cassandra.Metz@Illinois.gov>
Sent: Wednesday, August 31, 2022 12:52 PM
To: James Burris <James.Burris@bunge.com>
Subject: RE: Public Notice Permit - Comments

Good afternoon,

Thank you for your email. Comments may be emailed directly to me. People sometimes send their comments in the mail, but a hard copy is not required. Either on their own is acceptable. If you prefer to mail the comments, you may send it with attention to me, Cassandra Metz #5 at 1021 North Grand Avenue East, Springfield IL 62794. I will let the permit writer know you contacted me so that the permit is not issued without considering your comments.

Sincerely,

Cassandra Metz
Community Relations Coordinator
Associate Director's Office
(217)785-7491

From: James Burris <James.Burris@bunge.com>
Sent: Wednesday, August 31, 2022 11:40 AM
To: Metz, Cassandra <Cassandra.Metz@Illinois.gov>
Subject: [External] Public Notice Permit - Comments

Cassandra,

I would like to submit comments on a public noticed permit. I have a few questions on how to do this.

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Thank you for your assistance.

Jim Burris, PE

Phone: 314-292-2937

Mobile: 314-308-3904

1391 Timberlake Manor Parkway
Chesterfield, MO 63017

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Kras, Kim

From: Bernoteit, Bob
Sent: Wednesday, August 31, 2022 1:36 PM
To: Marr, Bill
Subject: FW: Public Notice Permit - Comments

FYI. Bunge.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, August 31, 2022 1:23 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: FW: Public Notice Permit - Comments

Fyi

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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Subject: [External] Public Notice Permit - Comments

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BUNGE

Bunge North America, Inc.
321 E. North Street
Danville, IL 61832

September 2, 2022

Cassandra Metz
Office of Community Relations
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794

Re: Comments on Public Notice Federally Enforceable State Operating Permit (FESOP)
Bunge Milling, Inc – Danville Facility
Source ID No. 183020ABT

Dear Ms. Metz:

Bunge submits this letter to provide comments on the proposed Federally Enforceable State Operating Permit (FESOP), Application No. 96020027, for the Bunge Milling, Inc. facility located in Danville, Illinois, facility ID No. 183020ABT.

Bunge has reviewed the public notice version of the proposed permit and has serious concerns about some of the language and permit conditions. Bunge looks forward to the agencies' careful consideration of our comments below.

1) On pages 1 through 6 of 35, List of Emission Unit for which the permit is issued:
   - Listing the specific baghouse model numbers in the FESOP is not necessary and provides no benefit to the permit. Under 35 IAC 201.146(hhh) replacement of air pollution control equipment is exempted from the requirement to obtain a construction permit. Therefore, when a baghouse is replaced with a different model baghouse the model number will not match what is listed in the FESOP. Bunge requests that reference to a specific baghouse model numbers be removed from the description of each emission unit. *Example: Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filter ~~APM 40072.10~~*
   - Bunge reviewed the list of emission units and discovered some emission unit ID numbers and unit descriptions that are not accurate. Bunge request that the emission unit ID numbers and unit descriptions be updated to reflect the changes listed below. Some of these changes are to standardize the naming convention for emission units at the facility, some are to correct inaccuracies, and some are to allow the emission unit names to match emission unit names used in conditions 12a, 12b and 12c of the permit. See the redlined copy of the FESOP for a complete list of updated emission unit numbers and names. Some emission units were removed in the redlined version of the permit either because they are already included in the list as part of another emission unit or no longer exist at the facility.
     - Railcar Dump Pit and Section D & E General Aspiration (5012-0007-0015) controlled by Baghouse Filter
     - Truck Dump #4 and West Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filter
     - Bldg 115 Corn Cleaning (4880-0034-0069) controlled by Baghouse Filter
     - North Street Truck Dump #2 (5012-0002-0012) controlled by Baghouse Filter

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- Bldg 105/115 General Aspiration (4880-0034-0001) controlled by Baghouse
- Filter
- Bldg 102/105 General Aspiration (4880-0034-0027) controlled by Baghouse
- Filter
- Pack and Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filter
- 3/4 Pulvocron Meal Bin (4990-0002-0008) controlled by Baghouse
- Filter
- 1/2 Pulvocron Meal Bin (4990-0005-0010) controlled by Baghouse
- Filter
- 9/10 Pulvocron Meal Bin (4990-0004-0011) controlled by Baghouse
- Filter
- 7/8 Pulvocron Meal Bin (4990-0003-0008) controlled by Baghouse Filter
- Hibond Visc Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filter
- Blended Food Packaging Aspiration (4820-0001-0052) controlled by Baghouse Filter
- Allbond Visc Flour General Aspiration (4900-0001-0068) controlled by
- Baghouse Filter
- 5/6 Allbond Receiver (4900-0001-0058) controlled by Baghouse Filter
- Blending General Aspiration (4990-0007-0036) controlled by Baghouse Filter
- Blending General Aspiration (4990-0007-0032) controlled by Baghouse Filter
- Finished Product General Aspiration (4990-0006-0040) controlled by Baghouse Filter
- Fiber Receiving General Aspiration (4990-0011-0001) controlled by Baghouse Filter
- Fiber Receiving General Aspiration (4990-0011-0029) controlled by Baghouse Filter
- Four (4) Ingredient Bins (601 (4820-0003-0022), 602 (4820-0003-0026), 603 (4820-0003-0030), and 604 (4820-0003-0034)controlled by Baghouse Filters
- Micro Ingredient Dump Aspiration (4820-0003-0018) controlled by Baghouse Filter
- Reprocessing General Aspiration (4900-0005-0001) controlled by Baghouse Filter
- #6 Pulvocron (4900-0001-0042) controlled by Baghouse Filter
- Germ Dust Aspiration (4860-0017-0073) controlled by Cyclone (not by a Filter)
- Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260) (4880-0048-0012)
- PCM Hammermill (4900-0003-0011) controlled by Filter
- USG Hammermill (4900-0008-0027) controlled by Filter
- USG Secondary Extruder Transfer (4900-0008-0022) (no control)
- Whole Grain Dryer (4880-0046-0017)
- Whole Grain Hammermill (4880-0046-0028)
- Whole Grain Aspiration (4880-0046-0042)
- USG Primary Extruder Transfer (4900-0007-0020)
- 6th Floor Radar Pulsar (4860-0018-0044)
- Hominy Feed Bins Aspiration (4860-0018-0048) controlled by Baghouse Filter
- Hominy Grind General Aspiration (4750-0029-0001) controlled by Baghouse Filter

2) On page 6 of 35, Condition 1.c.: There are numerous construction permits have been issued to the facility that have emission limits or conditions that could conflict with conditions in the FESOP or no longer apply but are still enforceable. Bunge requests that this condition be amended to include all operating permits and construction permits.

3) On page 6 of 35, Condition 3.a.:
   - This condition states that Products Receiving is subject to the NSPS for Grain Elevators. Only Grain Receiving is subject to the NSPS for Grain Elevators not all

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Product Receiving. Bunge requests that the words Products Receiving be removed from this condition. Bunge also no longer receives soybeans at this facility. The vacuum systems listed are not subject to the NSPS. The condition should read Corn Receiving, Cleaning and Storage.

- This condition lists the affected facilities to which the NSPS applies but does not specify which emission units at the facility are subject to the NSPS. Bunge requests that this condition be amended to state that the emission units included in the Corn Receiving, Cleaning and Storage (NSPS) emission unit group are subject to the Grain Elevator NSPS, subpart DD while the emission units in the Corn Receiving, Cleaning and Storage (Pre-NSP) emission unit group are not.

4) On page 7 of 35, Condition 4.a.: Bunge request that the exception to 35 IAC 212.123(a) be referenced. That is, include the clause …or as allowed under 35 IAC 212.123(b).

5) On page 15 of 35, Condition 9.a.: This condition states that compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60. It is not clear in the condition that this requirement refers to the initial compliance demonstration. Bunge requests that the condition be amended to state that initial compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60.

6) On page 17 of 35, Condition 11.g, 11.h and 11.i.: These conditions appear to be artifact conditions from a permit for a different facility used as a template for Bunge's FESOP and were inadvertently left in the permit or contain references to the prior facility.
   - Condition g references using liquid by-products or waste materials as fuel sources. The two permitted boilers at the Bunge facility can only burn natural gas. Bunge requests that this condition be removed.
   - Condition h allows Illinois EPA the right to sample all fuels stored at the facility. Bunge does not store any fuels at the facility. Bunge requests that this condition be removed.
   - Condition i references the Ag Transload Facility. Bunge believes this should say the Bunge Facility. Bunge request that the condition be amended to replace Ag Transload Facility with Bunge Facility.
   - Lettering of condition i (now g) and l (now j) should be modified to account for conditions g and h being removed.

7) On pages 18 through 23 of 35, Conditions12.a, 12.b, and 12.c:
   - Emission unit name and emission rate changes:
     - Bldg 105/115 General Aspiration 0.002, 0.0015, 55,000, 0.94, 4.13, 0.71, 3.10
     - Bldg 102/105 General Aspiration 0.002, 0.0015, 43,700, 0.75, 3.28, 0.56, 2.46
     - #5 Pulvocron should be #6 Pulvocron
     - Bldg 112 Vacuum hourly emission rates should be 0.01 lb/hr, not zero
     - Pneumatic Lift Receiver for WG260 Transfer, PM10 emission rate should be 0.51 tpy
     - PCM Hammermill, PM10 emission rate should be 0.49 tpy
     - USG Hammermill, PM10 emission rate should be 0.49 tpy
     - USG Secondary Extruder Transfer, PM10 emission rate should be 3.00 tpy

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8) On page 23 of 35, Condition 12.f.: This condition requires the facility to monitor and record data from 136 emission units on a daily basis and calculate daily emission from each emission unit so that a 365-day rolling emission total from each emission unit can be used to demonstrate compliance with annual emission limits on each emission unit on a daily basis. It is unrealistic to expect the facility to perform daily and 365-day emission calculations to demonstrate compliance with annual limits. Except for the fugitive emission sources, the annual emission limits are based on 8760 hour per year of operation. In lieu of recording actual hours per day each emission unit operated, if Bunge were to assume each emission unit operated 24 hour per day 365 days per year the resulting emissions calculated would demonstrate compliance with the limits. Performing daily emission calculation for the point source emissions provides no benefit. For the three fugitive emission sources, Bunge proposes that monthly and 12-month rolling emission calculations would be sufficient to demonstrate compliance with these annual emission limits. Bunge requests that the conditions be amended to say that compliance with the annual limits in Conditions 12(a) through 12(e) be determined on a monthly basis and compliance determined on a 12-month rolling basis.

9) On pages 24 through 27, Conditions 14 and 15.: Conditions 14 and 15 are related to performance testing required by NSPS 40 CFR Part 60 regulations. Conditions 14 and 15 restate the methods for performing performance tests under 40 CFR Part 60. Two NSPS 40 CFR subparts apply to the Bunge facility; Subpart Dc for natural gas fired boiler between 10 and 100 MMBtu/hr and Subpart DD for grain elevators. Only Subpart DD contains any performance testing that would apply to any emission unit at the Bunge facility and then only for new, modified, or reconstructed emission units that are also affected facilities under Subpart DD. Adding a new Subpart DD emission unit, reconstructing, or modifying (as defined by Part 60) a Subpart DD emission unit would require an air construction permit. Any performance testing necessary should be addressed in the construction permit. Having these conditions in the FESOP provides no benefit they only serve to clutter and complicate the permit. Bunge expects a permit with only relevant permit conditions so reading and understanding each condition and compliance obligations are as easy as possible. For these reasons Bunge request the conditions 14 and 15 be removed from the permit.

10) On pages 27 and 28, Conditions 16.b. and 18.a.: Condition 16.b states testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA. Condition 18.a. states that within 90 days after the issuance of this permit the permittee shall i conduct Method 22 testing on all 136 emission units, and ii conduct Method 5 testing on all 136 emission units. These two conditions conflict.
    - Bunge believes that it is Illinois EPA intention to require testing to be performed upon written request. If this is the case the written request should identify the emission unit required to be tested, the purpose of the test, the test Methods to be used and any further testing instruction such as test duration or test frequency. There is no need to complicate the FESOP by having conditions 17 or 18 in the permit. They only serve to clutter and complicate the permit. Bunge requests to change Condition 16.b to read Upon written request from Illinois EPA to perform emission testing the permittee shall perform the requested testing using a qualified independent testing service. Bunge further requests that conditions 17 and 18 be removed from the permit as they now

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321 E. North Street
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serve no purpose.

- If, however, it is Illinois EPA intention to require Method 22 and Method 5 testing on 136 emission units within 90 days of the FESOP being issued, Bunge feels this is an unrealistic expectation and objects to this requirement.
- If Condition18 is not removed as requested as requested above, Bunge provides the following comments on Condition 18
- On page 28 of 35, Condition 18.a.i.: This condition contains the statement Thereafter, this testing shall be conducted on a quarterly basis. This requirement is inconsistent with the requirement to test based on a written request by Illinois EPA. Bunge request that this statement be removed from the permit.
- On page 29 of 35, Condition 18.a.ii.: This condition contains the statement Thereafter, this testing shall be conducted at least once every five years. This requirement is inconsistent with the requirement to test based on a written request by Illinois EPA. Bunge request that this statement be removed from the permit.
- On page 29 of 35, Condition 18.c: This condition requires a written test plan be submitted to Illinois EPA stating that this plan shall include at a minimum:

  i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;
  ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;
  iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;
  iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;
  v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;
  vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification
  vii. Any proposed use of an alternative test method, with detailed justification
  viii. The format and content of the Source Test Report.

  Bunge is concerned that these conditions are not consistent with regulations promulgated by the Illinois Pollution Control Board, specifically 35 IAC 283.220. 35 IAC 283.220(c) specifies what is required to be in a test plan. It states that a test plan must specify:
  - The purpose of the test,
  - The operating parameters,
  - The test method, and
  - Any other procedures that will be followed when conducting an emissions test

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Bunge North America, Inc.
321 E. North Street
Danville, IL 61832

pursuant to the provisions of this Part.
Furthermore, 35 IAC 283.220(d) states that a test plan need not be submitted where the source intends to use a standard test method or procedure.

Bunge requests that Condition 18.c be amended so that the required content of a test plan is consistent with what is required by the regulation and add language to incorporate the part of the regulation that allows for circumstances when a test plan is not required.

11) On page 33 of 35, Conditions 23.a.ix and 23.a.x: These conditions are related to the daily emission calculations required by Condition 12.f. Bunge requested in a previous comment to amend Condition 12.f to be a monthly requirement. Accordingly, Bunge requests that these conditions be similarly amended, Condition 23.a.ix should change hours/day to hours/month and Condition 23.a.x should change Daily to Monthly.

Our comments present numerous concerns with the proposed FESOP permit. Because it is Bunge's desire to comply with the permit and the permit conditions it is not unreasonable to expect the conditions to be succinct, reasonable, and supported by regulation. Thank you for your careful consideration of our comments.

Please contact me at (314) 292-2937 or by email at james.burris@bunge.com if you have any questions.

Sincerely,

James A Burris Jr

James A. Burris, Jr. PE
Environmental Specialist

Enclosure: Redlined version of the public notice version of the proposed FESOP permit.

Kras, Kim

From: Metz, Cassandra
Sent: Tuesday, September 6, 2022 9:00 AM
To: Barria, German; Bernoteit, Bob; Marr, Bill; Frost, Brad
Cc: Pressnall, Chris
Subject: FW: Public Notice Permit - Comments
Attachments: Danville - Bunge Comments on Public Notice FESOP letter - September 2, 2022.pdf; Danville - 2022-08-05 Public Notice Version of FESOP - Bunge redline - Sep 2, 2022.docx; Mailing List - Bunge NA Inc.xlsx

Good morning,

We have received a comment before the end of the comment period from the source for 183020ABT/95020027.

German, the mailing list is also attached.

Cassandra Metz
Community Relations Coordinator
Associate Director's Office
(217)785-7491

From: James Burris <James.Burris@bunge.com>
Sent: Friday, September 2, 2022 6:03 PM
To: Metz, Cassandra <Cassandra.Metz@Illinois.gov>
Cc: Michelle Bublitz <Michelle.Bublitz@bunge.com>
Subject: [External] RE: Public Notice Permit - Comments

Cassandra,

I have attached two files as our comments on the proposed public notice FESOP permit.

1) Bunge's written comments letter
2) Redlined copy of the proposed FESOP

Please let me know if you have any questions.

Jim Burris, PE
Phone: 314-292-2937
Mobile: 314-308-3904
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

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Subject: RE: Public Notice Permit - Comments

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Bunge North America, Inc.
321 E. North Street
Danville, IL 61832

September 2, 2022

Cassandra Metz
Office of Community Relations
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794

Re: Comments on Public Notice Federally Enforceable State Operating Permit (FESOP)
Bunge Milling, Inc – Danville Facility
Source ID No. 183020ABT

Dear Ms. Metz:

Bunge submits this letter to provide comments on the proposed Federally Enforceable State Operating Permit (FESOP), Application No. 96020027, for the Bunge Milling, Inc. facility located in Danville, Illinois, facility ID No. 183020ABT.

Bunge has reviewed the public notice version of the proposed permit and has serious concerns about some of the language and permit conditions. Bunge looks forward to the agencies' careful consideration of our comments below.

1) On pages 1 through 6 of 35, List of Emission Unit for which the permit is issued:
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     - Bldg 115 Corn Cleaning (4880-0034-0069) controlled by Baghouse Filter
     - North Street Truck Dump #2 (5012-0002-0012) controlled by Baghouse Filter

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Danville, IL 61832

- Bldg 105/115 General Aspiration (4880-0034-0001) controlled by Baghouse
- Filter
- Bldg 102/105 General Aspiration (4880-0034-0027) controlled by Baghouse
- Filter
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- 1/2 Pulvocron Meal Bin (4990-0005-0010) controlled by Baghouse
- Filter
- 9/10 Pulvocron Meal Bin (4990-0004-0011) controlled by Baghouse
- Filter
- 7/8 Pulvocron Meal Bin (4990-0003-0008) controlled by Baghouse Filter
- Hibond Visc Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filter
- Blended Food Packaging Aspiration (4820-0001-0052) controlled by Baghouse Filter
- Allbond Visc Flour General Aspiration (4900-0001-0068) controlled by
- Baghouse Filter
- 5/6 Allbond Receiver (4900-0001-0058) controlled by Baghouse Filter
- Blending General Aspiration (4990-0007-0036) controlled by Baghouse Filter
- Blending General Aspiration (4990-0007-0032) controlled by Baghouse Filter
- Finished Product General Aspiration (4990-0006-0040) controlled by Baghouse Filter
- Fiber Receiving General Aspiration (4990-0011-0001) controlled by Baghouse Filter
- Fiber Receiving General Aspiration (4990-0011-0029) controlled by Baghouse Filter
- Four (4) Ingredient Bins (601 (4820-0003-0022), 602 (4820-0003-0026), 603 (4820-0003-0030), and 604 (4820-0003-0034)controlled by Baghouse Filters
- Micro Ingredient Dump Aspiration (4820-0003-0018) controlled by Baghouse Filter
- Reprocessing General Aspiration (4900-0005-0001) controlled by Baghouse Filter
- #6 Pulvocron (4900-0001-0042) controlled by Baghouse Filter
- Germ Dust Aspiration (4860-0017-0073) controlled by Cyclone (not by a Filter)
- Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260) (4880-0048-0012)
- PCM Hammermill (4900-0003-0011) controlled by Filter
- USG Hammermill (4900-0008-0027) controlled by Filter
- USG Secondary Extruder Transfer (4900-0008-0022) (no control)
- Whole Grain Dryer (4880-0046-0017)
- Whole Grain Hammermill (4880-0046-0028)
- Whole Grain Aspiration (4880-0046-0042)
- USG Primary Extruder Transfer (4900-0007-0020)
- 6th Floor Radar Pulsar (4860-0018-0044)
- Hominy Feed Bins Aspiration (4860-0018-0048) controlled by Baghouse Filter
- Hominy Grind General Aspiration (4750-0029-0001) controlled by Baghouse Filter

2) On page 6 of 35, Condition 1.c.: There are numerous construction permits have been issued to the facility that have emission limits or conditions that could conflict with conditions in the FESOP or no longer apply but are still enforceable. Bunge requests that this condition be amended to include all operating permits and construction permits.

3) On page 6 of 35, Condition 3.a.:
   - This condition states that Products Receiving is subject to the NSPS for Grain Elevators. Only Grain Receiving is subject to the NSPS for Grain Elevators not all

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Bunge North America, Inc.
321 E. North Street
Danville, IL 61832

Product Receiving. Bunge requests that the words Products Receiving be removed from this condition. Bunge also no longer receives soybeans at this facility. The vacuum systems listed are not subject to the NSPS. The condition should read Corn Receiving, Cleaning and Storage.

- This condition lists the affected facilities to which the NSPS applies but does not specify which emission units at the facility are subject to the NSPS. Bunge requests that this condition be amended to state that the emission units included in the Corn Receiving, Cleaning and Storage (NSPS) emission unit group are subject to the Grain Elevator NSPS, subpart DD while the emission units in the Corn Receiving, Cleaning and Storage (Pre-NSP) emission unit group are not.

4) On page 7 of 35, Condition 4.a.: Bunge request that the exception to 35 IAC 212.123(a) be referenced. That is, include the clause ...or as allowed under 35 IAC 212.123(b).

5) On page 15 of 35, Condition 9.a.: This condition states that compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60. It is not clear in the condition that this requirement refers to the initial compliance demonstration. Bunge requests that the condition be amended to state that initial compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60.

6) On page 17 of 35, Condition 11.g, 11.h and 11.i.: These conditions appear to be artifact conditions from a permit for a different facility used as a template for Bunge's FESOP and were inadvertently left in the permit or contain references to the prior facility.
   - Condition g references using liquid by-products or waste materials as fuel sources. The two permitted boilers at the Bunge facility can only burn natural gas. Bunge requests that this condition be removed.
   - Condition h allows Illinois EPA the right to sample all fuels stored at the facility. Bunge does not store any fuels at the facility. Bunge requests that this condition be removed.
   - Condition i references the Ag Transload Facility. Bunge believes this should say the Bunge Facility. Bunge request that the condition be amended to replace Ag Transload Facility with Bunge Facility.
   - Lettering of condition i (now g) and l (now j) should be modified to account for conditions g and h being removed.

7) On pages 18 through 23 of 35, Conditions12.a, 12.b, and 12.c:
   - Emission unit name and emission rate changes:
     - Bldg 105/115 General Aspiration 0.002, 0.0015, 55,000, 0.94, 4.13, 0.71, 3.10
     - Bldg 102/105 General Aspiration 0.002, 0.0015, 43,700, 0.75, 3.28, 0.56, 2.46
     - #5 Pulvocron should be #6 Pulvocron
     - Bldg 112 Vacuum hourly emission rates should be 0.01 lb/hr, not zero
     - Pneumatic Lift Receiver for WG260 Transfer, PM10 emission rate should be 0.51 tpy
     - PCM Hammermill, PM10 emission rate should be 0.49 tpy
     - USG Hammermill, PM10 emission rate should be 0.49 tpy
     - USG Secondary Extruder Transfer, PM10 emission rate should be 3.00 tpy

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8) On page 23 of 35, Condition 12.f.: This condition requires the facility to monitor and record data from 136 emission units on a daily basis and calculate daily emission from each emission unit so that a 365-day rolling emission total from each emission unit can be used to demonstrate compliance with annual emission limits on each emission unit on a daily basis. It is unrealistic to expect the facility to perform daily and 365-day emission calculations to demonstrate compliance with annual limits. Except for the fugitive emission sources, the annual emission limits are based on 8760 hour per year of operation. In lieu of recording actual hours per day each emission unit operated, if Bunge were to assume each emission unit operated 24 hour per day 365 days per year the resulting emissions calculated would demonstrate compliance with the limits. Performing daily emission calculation for the point source emissions provides no benefit. For the three fugitive emission sources, Bunge proposes that monthly and 12-month rolling emission calculations would be sufficient to demonstrate compliance with these annual emission limits. Bunge requests that the conditions be amended to say that compliance with the annual limits in Conditions 12(a) through 12(e) be determined on a monthly basis and compliance determined on a 12-month rolling basis.

9) On pages 24 through 27, Conditions 14 and 15.: Conditions 14 and 15 are related to performance testing required by NSPS 40 CFR Part 60 regulations. Conditions 14 and 15 restate the methods for performing performance tests under 40 CFR Part 60. Two NSPS 40 CFR subparts apply to the Bunge facility; Subpart Dc for natural gas fired boiler between 10 and 100 MMBtu/hr and Subpart DD for grain elevators. Only Subpart DD contains any performance testing that would apply to any emission unit at the Bunge facility and then only for new, modified, or reconstructed emission units that are also affected facilities under Subpart DD. Adding a new Subpart DD emission unit, reconstructing, or modifying (as defined by Part 60) a Subpart DD emission unit would require an air construction permit. Any performance testing necessary should be addressed in the construction permit. Having these conditions in the FESOP provides no benefit they only serve to clutter and complicate the permit. Bunge expects a permit with only relevant permit conditions so reading and understanding each condition and compliance obligations are as easy as possible. For these reasons Bunge request the conditions 14 and 15 be removed from the permit.

10) On pages 27 and 28, Conditions 16.b. and 18.a.: Condition 16.b states testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA. Condition 18.a. states that within 90 days after the issuance of this permit the permittee shall i conduct Method 22 testing on all 136 emission units, and ii conduct Method 5 testing on all 136 emission units. These two conditions conflict.
    - Bunge believes that it is Illinois EPA intention to require testing to be performed upon written request. If this is the case the written request should identify the emission unit required to be tested, the purpose of the test, the test Methods to be used and any further testing instruction such as test duration or test frequency. There is no need to complicate the FESOP by having conditions 17 or 18 in the permit. They only serve to clutter and complicate the permit. Bunge requests to change Condition 16.b to read Upon written request from Illinois EPA to perform emission testing the permittee shall perform the requested testing using a qualified independent testing service. Bunge further requests that conditions 17 and 18 be removed from the permit as they now

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serve no purpose.

- If, however, it is Illinois EPA intention to require Method 22 and Method 5 testing on 136 emission units within 90 days of the FESOP being issued, Bunge feels this is an unrealistic expectation and objects to this requirement.
- If Condition18 is not removed as requested as requested above, Bunge provides the following comments on Condition 18
- On page 28 of 35, Condition 18.a.i.: This condition contains the statement Thereafter, this testing shall be conducted on a quarterly basis. This requirement is inconsistent with the requirement to test based on a written request by Illinois EPA. Bunge request that this statement be removed from the permit.
- On page 29 of 35, Condition 18.a.ii.: This condition contains the statement Thereafter, this testing shall be conducted at least once every five years. This requirement is inconsistent with the requirement to test based on a written request by Illinois EPA. Bunge request that this statement be removed from the permit.
- On page 29 of 35, Condition 18.c: This condition requires a written test plan be submitted to Illinois EPA stating that this plan shall include at a minimum:

  i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;
  ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;
  iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;
  iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;
  v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;
  vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification
  vii. Any proposed use of an alternative test method, with detailed justification
  viii. The format and content of the Source Test Report.

  Bunge is concerned that these conditions are not consistent with regulations promulgated by the Illinois Pollution Control Board, specifically 35 IAC 283.220. 35 IAC 283.220(c) specifies what is required to be in a test plan. It states that a test plan must specify:
  - The purpose of the test,
  - The operating parameters,
  - The test method, and
  - Any other procedures that will be followed when conducting an emissions test

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pursuant to the provisions of this Part.
Furthermore, 35 IAC 283.220(d) states that a test plan need not be submitted where the source intends to use a standard test method or procedure.

Bunge requests that Condition 18.c be amended so that the required content of a test plan is consistent with what is required by the regulation and add language to incorporate the part of the regulation that allows for circumstances when a test plan is not required.

11) On page 33 of 35, Conditions 23.a.ix and 23.a.x: These conditions are related to the daily emission calculations required by Condition 12.f. Bunge requested in a previous comment to amend Condition 12.f to be a monthly requirement. Accordingly, Bunge requests that these conditions be similarly amended, Condition 23.a.ix should change hours/day to hours/month and Condition 23.a.x should change Daily to Monthly.

Our comments present numerous concerns with the proposed FESOP permit. Because it is Bunge's desire to comply with the permit and the permit conditions it is not unreasonable to expect the conditions to be succinct, reasonable, and supported by regulation. Thank you for your careful consideration of our comments.

Please contact me at (314) 292-2937 or by email at james.burris@bunge.com if you have any questions.

Sincerely,

James A Burris Jr

James A. Burris, Jr. PE
Environmental Specialist

Enclosure: Redlined version of the public notice version of the proposed FESOP permit.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filter;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filter;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filter;
Railcar Dump Pit and Section D & E General Aspiration (5012-0007-0015) controlled by Baghouse Filter;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filter;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filter;

Corn Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filter;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filter;
Bldg 115 Corn Cleaning (4880-0034-0069) controlled by Baghouse Filter;
North Street Truck Dump #2 (5012-0002-0012) controlled by Baghouse Filter;

Dry Corn Milling, Processing and Products Handling:

Bemos Bagging (4870-0010-0055) controlled by Baghouse Filter;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filter;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filter;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filter;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filter;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filter;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filter;
Bldg 105/115 General Aspiration (4880-0034-0001) controlled by Baghouse Filter;
Bldg 102/105 General Aspiration (4880-0034-0027) controlled by Baghouse Filter;
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filter;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filter;
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filter;
Bran Bin (4880-0042-0054) controlled by Baghouse Filter;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filter;
South CD Screening (4880-0034-0042) controlled by Baghouse Filter;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filter;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filter;
Pack and Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filter;
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filter;
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filter;
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filter;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filter;
Lab Filter (4932-0001-0001) controlled by Baghouse Filter;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filter;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filter;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filter;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filter;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filter;

Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filter;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filter;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filter;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filter;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filter;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filter;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filter;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filter;
Hibond Visc Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filter;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filter;
Blended Food Packaging Aspiration (4820-0001-0052) controlled by Baghouse Filter;
Allbond Visc Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filter;
Milk Bins (4820-0003-0007) controlled by Baghouse Filter;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filter;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filter;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filter;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filter;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filter;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filter;
5/6 Allbond Receiver (4900-0001-0058) controlled by Baghouse Filter;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filter;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filter;
Milk Bins (4820-0002-0038)controlled by Baghouse Filter;

Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filter;
Blending General Aspiration (4990-0007-0036) controlled by Baghouse Filter;
Blending General Aspiration (4990-0007-0032) controlled by Baghouse Filter;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filter;
Finished Product General Aspiration (4990-0006-0040) controlled by Baghouse Filter;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filter;
Fiber Receiving General Aspiration (4990-0011-0001) controlled by Baghouse Filter;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filter;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filter;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filter;
Fiber Receiving General Aspiration (4990-0011-0029) controlled by Baghouse Filter;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filter;
Four (4) Ingredient Bins (601 (4820-0003-0022), 602 (4820-0003-0026), 603 (4820-0003-0030), and 604 (4820-0003-0034)controlled by Baghouse Filters;
Micro Ingredient Dump Aspiration (4820-0003-0018) controlled by Baghouse Filter;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filter;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filter;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filter;
Reprocessing General Aspiration (4900-0005-0001) controlled by Baghouse Filter;
#6 Pulvocron (4900-0001-0042) controlled by Baghouse Filter;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filter;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filter;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filter;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filter;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filter;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filter;

AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filter;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filter;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filter;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filter;
Bran Dryer (4860-0024-0003) controlled by Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filter;
Germ Dust Aspiration (4860-0017-0073) controlled by Cyclone;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filter;
Germ Dryer (4860-0017-0003) controlled by Cyclone;
FTS Dryer Aspiration (4860-0019-0003) controlled by Cyclone;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filter;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260) (4880-0048-0012);
PCM Hammermill (4900-0003-0011) controlled by Filter;
USG Hammermill (4900-0008-0027) controlled by Filter;
USG Secondary Extruder Transfer (4900-0008-0022);
Whole Grain Dryer (4880-0046-0017);
Whole Grain Hammermill (4880-0046-0028);
Whole Grain Aspiration (4880-0046-0042);
USG Primary Extruder Transfer (4900-0007-0020);
6th Floor Radar Pulsar (4860-0018-0044);
CCM260 Process Aspiration (4912-0002-0054) controlled by Filter;

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filter;
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filter;
Hominy Feed Bins Aspiration (4860-0018-0048) controlled by Baghouse Filter;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filter;
Hominy Grind General Aspiration (4750-0029-0001) controlled by Baghouse Filter;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filter;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filter;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filter;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating and construction permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn Receiving, Cleaning and Storage (NSPS) emission units except the Hoffman Bldg 301 Vacuum and the Track 6 Vacuum are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60. 300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations. 40 CFR Part 60 Subpart DD does not apply to the emission units in the Corn Receiving, Cleaning and Storage (Pre-NSPS) emission unit group.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn Receiving, Cleaning and Storage (Pre- NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122 or as allowed under 35 Ill. Adm. Code 212.123(b).

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute

period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units).

Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause

or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency

of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), initial compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner

consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on the Bunge Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(j).

h. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

i. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

j. The emission units described in Conditions 11(g), (h), and (i) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

k. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

l. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(l) and (m).

m. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(l) and (m) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04

Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Truck Dump #4 and West Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North Street Truck Dump #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19
Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General	0.002	0.0015	55,000	0.94	4.13	0.71	3.10

Aspiration							
Bldg 102/105 General Aspiration	0.002	0.0015	43,700	0.75	3.28	0.56	2.46
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack and Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food	0.002	0.0015	4,077	0.07	0.31	0.05	0.23

First Name	Last Name	Address	City	State	ZIP
American Lung Association of IL-IA	John DeRosa	3000 Kelly Lane	Springfield	IL	62711
HeplerBroom LLC	LaDonna Driver	4340 Acer Grove Dr.	Springfield	IL	62711
Bunge Milling, Inc.	Attn: Paul Catterson	321 East North Street	Danville	IL	61832
Congresswoman	Mary Miller	201 North Vermillion Street, Suite 218	Danville	IL	61832
Illinois State Representative	Michael T. Marron	7 E. Fairchild Street	Danville	IL	61832
County Clerk	Cathy Jenkins	201 N. Vermilion St., First Floor	Danville	IL	61832
Village Clerk	Lori Fields	1001 Tilton Rd	Tilton	IL	61833

Emails

Duckworth contact	Springfield Office	Randy_Sikowski@duckworth.senate.gov
Illinois State Senator	Scott M. Bennett 52	michelle@senatorbennett.com
	Precious Onuohah	precious.onuohah@sierraclub.org
Mayor	Rickey Williams, Jr.	mayor@cityofdanville.org
City Clerk	Lisa Monson	cityclerk@cityofdanville.org
County Board Chair	Larry Baughn	lbaughn@vercounty.org
County State's Attorney	Jacqueline Lacy	statesattorney@vercounty.org
Mayor within 3 mi.	David Phillips, Sr.	dphillips@tiltonil.com

Municipalities within three miles of the source: Tilton

Source: 321 E. North St, Danville IL
Located in an EJ area; 3% speak English "less than very well"

The list should include both those who have expressed an interest in, and those that may be affected by, the activity. (p47/121 from USEPA's Public Involvement in Environmental Permits)

PERMIT CALCULATION SHEET

Facility: : Bunge North America, Inc.	**I.D.:** 183020ABT
Anal. Eng.: GB **Date:** 12-29-22	**P.N.:** 96020027
Rev. Eng.: _____ **Date:** _____	**Date Rec.:** 12/05/11

Section 1: Identify noted File Traveler Sheet and ICEMAN source information that may affect permit issuance; if active VN indicate if Compliance is ok with issuance of a permit or NOI/Denial letter:
No current violation, there was a USEPA NOV/ Soybean Processing/ Consent Decree back in 2007/2008. there doesn't seem to have been a certify investigation on file. The source is located at 321 East North Street, Danville, Vermilion County. There is also a flag for the facility because this Source is located in an E.J. area with >=70% minority population.

LEGAL:	None
FOS FLAG:	None
CROPA:	None
Other	The source is not subject to 212.302(a) or (b)

Section 2: Identify type of permit and brief summary of application/permit history if submitted in response to a NOI/Denial letter or to request revision to an existing permit:
The purpose for opening this permit is to review the application for Title V FESOP received on December, 2011. The source is requesting a Federally Enforceable State Operating Permit (FESOP) permit # 96020027 for their corn mill and grain elevator. The source requires a FESOP to limit their potential emission to less than 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10}). The current ICEMAN status for the above mentioned permit number #96020027 is for operating.

Section 3: Description of the source with an itemized list of emission units and pollution control equipment included in the application. If for an operating permit, list all existing and proposed units and equipment that the operating permit will need to address:
Bunge North America, Inc owns and operates a corn mill and grain elevator that creates flour and other grain mill products such as PCM and USG specialty starch binder which are used to sold to wallboard fabricators to aid in bonding paper to gypsum. The facility located at 321 East North Street, Danville, Vermilion County. This permit is granted to the above-designated Permittee to operate emission units and/or air pollution control equipment consisting of the following:

Emission Units:

Corn Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filter;
Hoffman Bldg. 301 Vacuum (5012-0010-0054) controlled by Baghouse Filter;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filter;
Railcar Dump Pit and Section D & E General Aspiration (5012-0007-0015) controlled by Baghouse Filter;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filter;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filter;

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filter;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filter;
Bldg. 115 Corn Cleaning (4880-0034-0069) controlled by Baghouse Filter;
North Street Truck Dump #2 (5012-0002-0012) controlled by Baghouse Filter;

Dry Corn Milling, Processing and Products Handling:
Bemos Bagging (4870-0010-0055) controlled by Baghouse Filter;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filter;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filter;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filter;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filter;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filter;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filter;
Bldg. 105/115 General Aspiration (4880-0034-0001) controlled by Baghouse Filter;
Bldg. 102/105 General Aspiration (4880-0034-0027) controlled by Baghouse Filter;
Bldg. 105 Vacuum (4880-0032-0052) controlled by Baghouse Filter;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filter;
Bldg. 104 Vacuum (4870-0015-0016) controlled by Baghouse Filter;

Bran Bin (4880-0042-0054) controlled by Baghouse Filter;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filter;
South CD Screening (4880-0034-0042) controlled by Baghouse Filter;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filter;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filter;
Pack and Bulk Loading Bldg. 115 (4870-0013-0024) controlled by Baghouse Filter;
CAMAS/Bran Bldg. 115 (4880-0034-0077) controlled by Baghouse Filter;
Thru/Tail Stock Dryers Bldg. 115 (4880-0034-0071) controlled by Baghouse Filter;
Bldg. 115 Vacuum (4880-0032-0070) controlled by Baghouse Filter;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filter;
Lab Filter (4932-0001-0001) controlled by Baghouse Filter;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filter;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filter;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filter;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filter;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filter;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022),
#9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filter;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filter;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filter;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filter;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filter;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filter;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filter;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filter;
Hibond Visc Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filter;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filter;
Blended Food Packaging Aspiration (4820-0001-0052) controlled by Baghouse Filter;
Allbond Visc Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filter;
Milk Bins (4820-0003-0007) controlled by Baghouse Filter;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filter;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filter;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filter;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filter;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filter;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filter;
5/6 Allbond Receiver (4900-0001-0058) controlled by Baghouse Filter;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filter;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filter;
Milk Bins (4820-0002-0038)controlled by Baghouse Filter;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filter;
Blending General Aspiration (4990-0007-0036) controlled by Baghouse Filter;
Blending General Aspiration (4990-0007-0032) controlled by Baghouse Filter;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filter;
Finished Product General Aspiration (4990-0006-0040) controlled by Baghouse Filter;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by

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Baghouse Filter;
Fiber Receiving General Aspiration (4990-0011-0001) controlled by Baghouse Filter;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filter;
Bldg. 111 Vacuum (4900-0005-0035) controlled by Baghouse Filter;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filter;
Fiber Receiving General Aspiration (4990-0011-0029) controlled by Baghouse Filter;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filter;
Four (4) Ingredient Bins (601 (4820-0003-0022), 602 (4820-0003-0026), 603 (4820-0003-0030), and 604 (4820-0003-0034)controlled by Baghouse Filters;
Micro Ingredient Dump Aspiration (4820-0003-0018) controlled by Baghouse Filter;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filter;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filter;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filter;
Reprocessing General Aspiration (4900-0005-0001) controlled by Baghouse Filter;
#6 Pulvocron (4900-0001-0042) controlled by Baghouse Filter;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filter;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filter;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filter;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filter;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filter;
Bldg. 112 Vacuum (4900-0005-0029) controlled by Baghouse Filter;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filter;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filter;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filter;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filter;
Bran Dryer (4860-0024-0003) controlled by Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filter;
Germ Dust Aspiration (4860-0017-0073) controlled by Cyclone;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filter;
Germ Dryer (4860-0017-0003) controlled by Cyclone;
FTS Dryer Aspiration (4860-0019-0003) controlled by Cyclone;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filter;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260) (4880-0048-0012);
PCM Hammermill (4900-0003-0011) controlled by Filter;
USG Hammermill (4900-0008-0027) controlled by Filter;
USG Secondary Extruder Transfer (4900-0008-0022);
Whole Grain Dryer (4880-0046-0017);
Whole Grain Hammermill (4880-0046-0028);
Whole Grain Aspiration (4880-0046-0042);
USG Primary Extruder Transfer (4900-0007-0020);
6th Floor Radar Pulsar (4860-0018-0044);
CCM260 Process Aspiration (4912-0002-0054) controlled by Filter;

Corn Mill Products Storage:
Bldg. 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filter;
Bldg. 208 Vacuum (4912-0009-0005) controlled by Baghouse Filter;
Hominy Feed Bins Aspiration (4860-0018-0048) controlled by Baghouse Filter;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filter;
Hominy Grind General Aspiration (4750-0029-0001) controlled by Baghouse Filter;

Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filter;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filter;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filter;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NOx Burner (Boiler#1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM10 emissions.

Section 4: Identify the proposed type(s) and maximum actual operating quantities and rates of pollutant containing materials to be used/processed/produced that will be included in permit:

The amount of grain receipts in LTMS Truck/Rail Dump Pit shall not exceeded 12,500 tons per month and 75,000 tons per year;
The amount of grain loadout in LTMS Truck Loadout shall not exceed 12,500 tons per month and 75,000 tons per year;
Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year for boiler #1;
Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year for the Clayton Boiler;

Baghouse S 105 Roof Carter-Day Filter (34:86) flow rate 40,600dscfm, 99.9 control efficiency;
Baghouse 8th Floor Donaldson Filter (34:27) flow rate 600 dscfm;
Baghouse West MAC Filter (34:01) flow rate 740 dscfm; and
Baghouse South APM Filter (34:35) flow rate to be distributed to Baghouses 8th Floor Donaldson, West MAC, North Lunchroom, and South Lunchroom – 28,220 dscfm.

Section 5: Identify the proposed type(s), quantities and rates of maximum actual operating emissions for the source to be included in the permit including the units/controls proposed. Identify the source(s) of the emission factors used:

The proposed type, quantities and rates of maximum actual operating emissions for the source are as follow:

Emissions from and operation of the Corn Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	EMISSIONS PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04
Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

Emissions from and operation of the Corn Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

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Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	(Tons/Yr)	PM_{10} (lbs/Hr)	(Tons/Yr)
Truck Dump #4 & W. Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg. 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North Street Truck Dump Pit #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	(Tons/Yr)	PM_{10} (lbs/Hr)	(Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19
Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General Aspiration	0.002	0.0015	43,700	0.75	3.28	0.56	2.46
Bldg 102/105 General Aspiration	0.002	0.0015	55,000	0.94	4.13	0.71	3.10
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack & Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03

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7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food Receiver	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02
300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04
#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
PCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08
Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
Ingredient Bin 601	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 602	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 603	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 604	0.002	0.0015	210	0.004	0.02	0.003	0.01
Micro Ingredient Dump Aspiration	0.002	0.0015	2,500	0.04	0.19	0.03	0.14
Mixer General Aspiration	0.002	0.0015	1,500	0.03	0.11	0.02	0.08

3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04
Viscosity Flour Receiver	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0	0.02	0	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grinding	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kice Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.02
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.0020
USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	0.0200
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42
CCM260 Process Aspiration(S 105 Carter-Day)	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

CALCULATION SHEET

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	(Tons/Yr)	PM_{10} (lbs/Hr)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	(Tons/Yr)	PM_{10} (lbs/Hr)	(Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

Emissions from and operation of Boiler #1 shall not exceed the following limits:

Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52
Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

Emissions from and operation of Clayton Boiler shall not exceed the following limits:

Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

Source Emission Summary:

	EMISSIONS (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

Section 6: Identify the source's potential-to-emit (PTE) including any proposed additions/revisions. Show calculations or reference where in application or file PTE is satisfactorily presented. Emissions from 35 IAC 201.146 exempt units must be included in PTE calculations:

The source's potential-to-emit (PTE), including any construction construction permit thaty has previously been issued indicates that this source had been a CAAPP source, and is requesting to be issued a FESOP to limit the emissions of air pollutants from the source to less than major source thresholds, the FESOP containing federally enforceable limits in the form of permit conditions which effectively restrict the potential emissions of a source to below major source threshold, thereby excluding the source from the CAAPP.

There have been the following construction permits granted since the FESOP App was received December 5, 2011 (11110009, 15100009, 16030026, 18050016, and 22040008).

CALCULATION SHEET

Section 7: List potentially applicable State and Federal (NSPS and NESHAP) regulations and indicate if application demonstrated those regulations would not be violated by construction and/or operation of equipment/units/processes in application:
Following is a list of potentially applicable State and Federal (NSPS and NESHAP) regulations and exemptions:

Applicable Regulations:
1) 35 Ill Adm. Code 212.123 no visible of PM with opacity greater than 30 percent.
2) 35 Ill. Adm. Code 212.206. no emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu)
3) 35 Ill Adm. Code 212.301 no emissions beyond property line
4) 35 Ill Adm. Code 212.321, 322 process emission rate, applies to milling process.
5) 35 Ill Adm. Code 212.461 grain handling and drying in general
6) 35 Ill Adm. Code 212.462 grain handling operations
7) 35 Ill. Adm. Code 212.463 grain-drying operations for which construction or modification commenced prior to June 30, 1975
8) 35 Ill. Adm. Code 214.122(b)(2), New Fuel Combustion Emission Sources,
9) 35 Ill. Adm. Code 214.301, Process Emission Sources
10) 35 Ill. Adm. Code 215.301 Use of Organic Material,
11) 35 Ill. Adm. Code 216.121 the steam boiler is subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources).
12) New Source Performance Standards (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc for steam boiler 10mmBtu/hr or greater
13) NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD,

It should be noted that the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3).
It should also be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i).

Section 8: Conclusions and recommendations. Indicate your final recommendation (e.g., NOI, denial, issue permit with conditions, etc.) and indicate reason(s) for that action:
It is recommended that a FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE be issue. A draft of this FESOP permit has undergone a public notice period, the only comments received were from the source regarding minor corrections to emission units designsation.

Kras, Kim

From:	Barria, German
Sent:	Thursday, December 29, 2022 11:54 AM
To:	Bernoteit, Bob
Subject:	Bunge North Anmerica - ID #183020ABT
Attachments:	96020027 Bunge North Anmerica - 12-29-2022.doc; Danville - 2022-08-05 Public Notice Version of FESOP - Bunge redline - Sep 2 2022.docx; Danville - Bunge Comments on Public Notice FESOP letter - September 2 2022.pdf

Bob this is the final draft of the FESOP after going through Bunge comments after notice.
If you are Ok with it, I will proceed to send it to typing and prepare the file.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filter;
Hoffman Bldg. 301 Vacuum (5012-0010-0054) controlled by Baghouse Filter;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filter;
Railcar Dump Pit and Section D & E General Aspiration (5012-0007-0015) controlled by Baghouse Filter;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filter;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filter;

Corn Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filter;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filter;
Bldg. 115 Corn Cleaning (4880-0034-0069) controlled by Baghouse Filter;
North Street Truck Dump #2 (5012-0002-0012) controlled by Baghouse Filter;

Dry Corn Milling, Processing and Products Handling:
Bemos Bagging (4870-0010-0055) controlled by Baghouse Filter;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filter;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filter;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filter;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filter;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filter;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filter;
Bldg. 105/115 General Aspiration (4880-0034-0001) controlled by Baghouse Filter;

Bldg. 102/105 General Aspiration (4880-0034-0027) controlled by Baghouse Filter;
Bldg. 105 Vacuum (4880-0032-0052) controlled by Baghouse Filter;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filter;
Bldg. 104 Vacuum (4870-0015-0016) controlled by Baghouse Filter;
Bran Bin (4880-0042-0054) controlled by Baghouse Filter;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filter;
South CD Screening (4880-0034-0042) controlled by Baghouse Filter;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filter;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filter;
Pack and Bulk Loading Bldg. 115 (4870-0013-0024) controlled by Baghouse Filter;
CAMAS/Bran Bldg. 115 (4880-0034-0077) controlled by Baghouse Filter;
Thru/Tail Stock Dryers Bldg. 115 (4880-0034-0071) controlled by Baghouse Filter;
Bldg. 115 Vacuum (4880-0032-0070) controlled by Baghouse Filter;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filter;
Lab Filter (4932-0001-0001) controlled by Baghouse Filter;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filter;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filter;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filter;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filter;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filter;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filter;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filter;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filter;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filter;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filter;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filter;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filter;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filter;
Hibond Visc Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filter;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filter;
Blended Food Packaging Aspiration (4820-0001-0052) controlled by Baghouse Filter;

Allbond Visc Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filter;
Milk Bins (4820-0003-0007) controlled by Baghouse Filter;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filter;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filter;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filter;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filter;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filter;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filter;
5/6 Allbond Receiver (4900-0001-0058) controlled by Baghouse Filter;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filter;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filter;
Milk Bins (4820-0002-0038)controlled by Baghouse Filter;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filter;
Blending General Aspiration (4990-0007-0036) controlled by Baghouse Filter;
Blending General Aspiration (4990-0007-0032) controlled by Baghouse Filter;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filter;
Finished Product General Aspiration (4990-0006-0040) controlled by Baghouse Filter;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filter;
Fiber Receiving General Aspiration (4990-0011-0001) controlled by Baghouse Filter;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filter;
Bldg. 111 Vacuum (4900-0005-0035) controlled by Baghouse Filter;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filter;
Fiber Receiving General Aspiration (4990-0011-0029) controlled by Baghouse Filter;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filter;
Four (4) Ingredient Bins (601 (4820-0003-0022), 602 (4820-0003-0026), 603 (4820-0003-0030), and 604 (4820-0003-0034)controlled by Baghouse Filters;
Micro Ingredient Dump Aspiration (4820-0003-0018) controlled by Baghouse Filter;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filter;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filter;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filter;
Reprocessing General Aspiration (4900-0005-0001) controlled by Baghouse Filter;
#6 Pulvocron (4900-0001-0042) controlled by Baghouse Filter;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filter;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filter;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filter;

Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filter;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filter;
Bldg. 112 Vacuum (4900-0005-0029) controlled by Baghouse Filter;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filter;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filter;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filter;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filter;
Bran Dryer (4860-0024-0003) controlled by Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filter;
Germ Dust Aspiration (4860-0017-0073) controlled by Cyclone;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filter;
Germ Dryer (4860-0017-0003) controlled by Cyclone;
FTS Dryer Aspiration (4860-0019-0003) controlled by Cyclone;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filter;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260) (4880-0048-0012);
PCM Hammermill (4900-0003-0011) controlled by Filter;
USG Hammermill (4900-0008-0027) controlled by Filter;
USG Secondary Extruder Transfer (4900-0008-0022);
Whole Grain Dryer (4880-0046-0017);
Whole Grain Hammermill (4880-0046-0028);
Whole Grain Aspiration (4880-0046-0042);
USG Primary Extruder Transfer (4900-0007-0020);
6th Floor Radar Pulsar (4860-0018-0044);
CCM260 Process Aspiration (4912-0002-0054) controlled by Filter;

Corn Mill Products Storage:
Bldg. 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filter;
Bldg. 208 Vacuum (4912-0009-0005) controlled by Baghouse Filter;
Hominy Feed Bins Aspiration (4860-0018-0048) controlled by Baghouse Filter;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filter;
Hominy Grind General Aspiration (4750-0029-0001) controlled by Baghouse Filter;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filter;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filter;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filter;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NOx Burner (Boiler#1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM10 emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60. 300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212

Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to

the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits

pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind

speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(l).

h. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

i. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

j. The emission units described in Conditions 11(i), (j), and (k) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

k. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

l. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(l) and (m).

m. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(l) and (m) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	EMISSIONS PM (Tons/Yr)	EMISSIONS PM_{10} (lbs/Hr)	EMISSIONS PM_{10} (Tons/Yr
Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04
Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	EMISSIONS PM (Tons/Yr)	EMISSIONS PM_{10} (lbs/Hr)	EMISSIONS PM_{10} (Tons/Yr)
Truck Dump #4 and Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg. 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North Street Truck Dump Pit #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	EMISSIONS PM (Tons/Yr)	EMISSIONS PM_{10} (lbs/Hr)	EMISSIONS PM_{10} (Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19
Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General Aspiration	0.002	0.0015	55,000	0.94	4.13	0.71	3.10
Bldg 102/105 General Aspiration	0.002	0.0015	43,700	0.75	3.28	0.56	2.26
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General	0.002	0.0015	33,300	0.57	2.5	0.43	1.88

Aspiration							
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack & Bulk Loading Bld 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flou Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food Receiver	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02
300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03

Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04
#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
PCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08
Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
Ingredient Bin 601	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 602	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 603	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 604	0.002	0.0015	210	0.004	0.02	0.003	0.01
Micro Ingredient Dump Aspiration	0.002	0.0015	2,500	0.04	0.19	0.03	0.14
Mixer General Aspiration	0.002	0.0015	1,500	0.03	0.11	0.02	0.08
3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04

Viscosity Flour Receiver	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0	0.02	0	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grinding	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kice Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.02
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.51
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.49
USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	0.49
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42
CCM260 Process Aspiration(S 105 Carter-Day)	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03

Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Compliance with the annual limits in Conditions 12(a) through 12(e) of this permit shall be determined on a daily basis from the sum of the data for the current day plus the preceding 364 days (running 365 days total).

g. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52
Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

h. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

i. Compliance with the annual limits in Condition 12(g) and (h) of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

14a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

15a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

17a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

18a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted on a quarterly basis no later than 30 days after the end of the preceding calendar quarter.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions

in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: (refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate,

minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are

required to more accurately assess the compliance status of the affected source.

20a. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If

relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 11(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/day and hours/year);

viii. Daily and annual emissions of PM, and PM_{10} from the source with supporting calculations (tons/month and tons/year).

ix. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

x. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year); and

xi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the combustion of natural gas, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 23(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

24. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

25. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

i. Via mail or overnight delivery:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. and electronically:

epa.boa.smu@illinois.gov

It should be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i) and the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3)

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

   a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

   b. Maintain the following records for a period of no less than two (2) years:

      i. Date and duration of malfunction, breakdown, or startup,

      ii. Full and detailed explanation of the cause,

      iii. Contaminants emitted and an estimate of quantity of emissions,

      iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

      v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

BUNGE

Bunge North America, Inc.
321 E. North Street
Danville, IL 61832

September 2, 2022

Cassandra Metz
Office of Community Relations
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794

Re: Comments on Public Notice Federally Enforceable State Operating Permit (FESOP)
Bunge Milling, Inc – Danville Facility
Source ID No. 183020ABT

Dear Ms. Metz:

Bunge submits this letter to provide comments on the proposed Federally Enforceable State Operating Permit (FESOP), Application No. 96020027, for the Bunge Milling, Inc. facility located in Danville, Illinois, facility ID No. 183020ABT.

Bunge has reviewed the public notice version of the proposed permit and has serious concerns about some of the language and permit conditions. Bunge looks forward to the agencies' careful consideration of our comments below.

1) On pages 1 through 6 of 35, List of Emission Unit for which the permit is issued:
   - Listing the specific baghouse model numbers in the FESOP is not necessary and provides no benefit to the permit. Under 35 IAC 201.146(hhh) replacement of air pollution control equipment is exempted from the requirement to obtain a construction permit. Therefore, when a baghouse is replaced with a different model baghouse the model number will not match what is listed in the FESOP. Bunge requests that reference to a specific baghouse model numbers be removed from the description of each emission unit. *Example: Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filter ~~APM 40072.10~~*
   - Bunge reviewed the list of emission units and discovered some emission unit ID numbers and unit descriptions that are not accurate. Bunge request that the emission unit ID numbers and unit descriptions be updated to reflect the changes listed below. Some of these changes are to standardize the naming convention for emission units at the facility, some are to correct inaccuracies, and some are to allow the emission unit names to match emission unit names used in conditions 12a, 12b and 12c of the permit. See the redlined copy of the FESOP for a complete list of updated emission unit numbers and names. Some emission units were removed in the redlined version of the permit either because they are already included in the list as part of another emission unit or no longer exist at the facility.
     - Railcar Dump Pit and Section D & E General Aspiration (5012-0007-0015) controlled by Baghouse Filter
     - Truck Dump #4 and West Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filter
     - Bldg 115 Corn Cleaning (4880-0034-0069) controlled by Baghouse Filter
     - North Street Truck Dump #2 (5012-0002-0012) controlled by Baghouse Filter

BUNGE

Bunge North America, Inc.
321 E. North Street
Danville, IL 61832

- Bldg 105/115 General Aspiration (4880-0034-0001) controlled by Baghouse
- Filter
- Bldg 102/105 General Aspiration (4880-0034-0027) controlled by Baghouse
- Filter
- Pack and Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filter
- 3/4 Pulvocron Meal Bin (4990-0002-0008) controlled by Baghouse
- Filter
- 1/2 Pulvocron Meal Bin (4990-0005-0010) controlled by Baghouse
- Filter
- 9/10 Pulvocron Meal Bin (4990-0004-0011) controlled by Baghouse
- Filter
- 7/8 Pulvocron Meal Bin (4990-0003-0008) controlled by Baghouse Filter
- Hibond Visc Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filter
- Blended Food Packaging Aspiration (4820-0001-0052) controlled by Baghouse Filter
- Allbond Visc Flour General Aspiration (4900-0001-0068) controlled by
- Baghouse Filter
- 5/6 Allbond Receiver (4900-0001-0058) controlled by Baghouse Filter
- Blending General Aspiration (4990-0007-0036) controlled by Baghouse Filter
- Blending General Aspiration (4990-0007-0032) controlled by Baghouse Filter
- Finished Product General Aspiration (4990-0006-0040) controlled by Baghouse Filter
- Fiber Receiving General Aspiration (4990-0011-0001) controlled by Baghouse Filter
- Fiber Receiving General Aspiration (4990-0011-0029) controlled by Baghouse Filter
- Four (4) Ingredient Bins (601 (4820-0003-0022), 602 (4820-0003-0026), 603 (4820-0003-0030), and 604 (4820-0003-0034)controlled by Baghouse Filters
- Micro Ingredient Dump Aspiration (4820-0003-0018) controlled by Baghouse Filter
- Reprocessing General Aspiration (4900-0005-0001) controlled by Baghouse Filter
- #6 Pulvocron (4900-0001-0042) controlled by Baghouse Filter
- Germ Dust Aspiration (4860-0017-0073) controlled by Cyclone (not by a Filter)
- Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260) (4880-0048-0012)
- PCM Hammermill (4900-0003-0011) controlled by Filter
- USG Hammermill (4900-0008-0027) controlled by Filter
- USG Secondary Extruder Transfer (4900-0008-0022) (no control)
- Whole Grain Dryer (4880-0046-0017)
- Whole Grain Hammermill (4880-0046-0028)
- Whole Grain Aspiration (4880-0046-0042)
- USG Primary Extruder Transfer (4900-0007-0020)
- 6th Floor Radar Pulsar (4860-0018-0044)
- Hominy Feed Bins Aspiration (4860-0018-0048) controlled by Baghouse Filter
- Hominy Grind General Aspiration (4750-0029-0001) controlled by Baghouse Filter

2) On page 6 of 35, Condition 1.c.: There are numerous construction permits have been issued to the facility that have emission limits or conditions that could conflict with conditions in the FESOP or no longer apply but are still enforceable. Bunge requests that this condition be amended to include all operating permits and construction permits.

3) On page 6 of 35, Condition 3.a.:
   - This condition states that Products Receiving is subject to the NSPS for Grain Elevators. Only Grain Receiving is subject to the NSPS for Grain Elevators not all

BUNGE

Bunge North America, Inc.
321 E. North Street
Danville, IL 61832

Product Receiving. Bunge requests that the words Products Receiving be removed from this condition. Bunge also no longer receives soybeans at this facility. The vacuum systems listed are not subject to the NSPS. The condition should read Corn Receiving, Cleaning and Storage.

- This condition lists the affected facilities to which the NSPS applies but does not specify which emission units at the facility are subject to the NSPS. Bunge requests that this condition be amended to state that the emission units included in the Corn Receiving, Cleaning and Storage (NSPS) emission unit group are subject to the Grain Elevator NSPS, subpart DD while the emission units in the Corn Receiving, Cleaning and Storage (Pre-NSP) emission unit group are not.

4) On page 7 of 35, Condition 4.a.: Bunge request that the exception to 35 IAC 212.123(a) be referenced. That is, include the clause ...or as allowed under 35 IAC 212.123(b).

5) On page 15 of 35, Condition 9.a.: This condition states that compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60. It is not clear in the condition that this requirement refers to the initial compliance demonstration. Bunge requests that the condition be amended to state that initial compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60.

6) On page 17 of 35, Condition 11.g, 11.h and 11.i.: These conditions appear to be artifact conditions from a permit for a different facility used as a template for Bunge's FESOP and were inadvertently left in the permit or contain references to the prior facility.
   - Condition g references using liquid by-products or waste materials as fuel sources. The two permitted boilers at the Bunge facility can only burn natural gas. Bunge requests that this condition be removed.
   - Condition h allows Illinois EPA the right to sample all fuels stored at the facility. Bunge does not store any fuels at the facility. Bunge requests that this condition be removed.
   - Condition i references the Ag Transload Facility. Bunge believes this should say the Bunge Facility. Bunge request that the condition be amended to replace Ag Transload Facility with Bunge Facility.
   - Lettering of condition i (now g) and l (now j) should be modified to account for conditions g and h being removed.

7) On pages 18 through 23 of 35, Conditions12.a, 12.b, and 12.c:
   - Emission unit name and emission rate changes:
     - Bldg 105/115 General Aspiration 0.002, 0.0015, 55,000, 0.94, 4.13, 0.71, 3.10
     - Bldg 102/105 General Aspiration 0.002, 0.0015, 43,700, 0.75, 3.28, 0.56, 2.46
     - #5 Pulvocron should be #6 Pulvocron
     - Bldg 112 Vacuum hourly emission rates should be 0.01 lb/hr, not zero
     - Pneumatic Lift Receiver for WG260 Transfer, PM10 emission rate should be 0.51 tpy
     - PCM Hammermill, PM10 emission rate should be 0.49 tpy
     - USG Hammermill, PM10 emission rate should be 0.49 tpy
     - USG Secondary Extruder Transfer, PM10 emission rate should be 3.00 tpy

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Bunge North America, Inc.
321 E. North Street
Danville, IL 61832

8) On page 23 of 35, Condition 12.f.: This condition requires the facility to monitor and record data from 136 emission units on a daily basis and calculate daily emission from each emission unit so that a 365-day rolling emission total from each emission unit can be used to demonstrate compliance with annual emission limits on each emission unit on a daily basis. It is unrealistic to expect the facility to perform daily and 365-day emission calculations to demonstrate compliance with annual limits. Except for the fugitive emission sources, the annual emission limits are based on 8760 hour per year of operation. In lieu of recording actual hours per day each emission unit operated, if Bunge were to assume each emission unit operated 24 hour per day 365 days per year the resulting emissions calculated would demonstrate compliance with the limits. Performing daily emission calculation for the point source emissions provides no benefit. For the three fugitive emission sources, Bunge proposes that monthly and 12-month rolling emission calculations would be sufficient to demonstrate compliance with these annual emission limits. Bunge requests that the conditions be amended to say that compliance with the annual limits in Conditions 12(a) through 12(e) be determined on a monthly basis and compliance determined on a 12-month rolling basis.

9) On pages 24 through 27, Conditions 14 and 15.: Conditions 14 and 15 are related to performance testing required by NSPS 40 CFR Part 60 regulations. Conditions 14 and 15 restate the methods for performing performance tests under 40 CFR Part 60. Two NSPS 40 CFR subparts apply to the Bunge facility; Subpart Dc for natural gas fired boiler between 10 and 100 MMBtu/hr and Subpart DD for grain elevators. Only Subpart DD contains any performance testing that would apply to any emission unit at the Bunge facility and then only for new, modified, or reconstructed emission units that are also affected facilities under Subpart DD. Adding a new Subpart DD emission unit, reconstructing, or modifying (as defined by Part 60) a Subpart DD emission unit would require an air construction permit. Any performance testing necessary should be addressed in the construction permit. Having these conditions in the FESOP provides no benefit they only serve to clutter and complicate the permit. Bunge expects a permit with only relevant permit conditions so reading and understanding each condition and compliance obligations are as easy as possible. For these reasons Bunge request the conditions 14 and 15 be removed from the permit.

10) On pages 27 and 28, Conditions 16.b. and 18.a.: Condition 16.b states testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA. Condition 18.a. states that within 90 days after the issuance of this permit the permittee shall i conduct Method 22 testing on all 136 emission units, and ii conduct Method 5 testing on all 136 emission units. These two conditions conflict.
    - Bunge believes that it is Illinois EPA intention to require testing to be performed upon written request. If this is the case the written request should identify the emission unit required to be tested, the purpose of the test, the test Methods to be used and any further testing instruction such as test duration or test frequency. There is no need to complicate the FESOP by having conditions 17 or 18 in the permit. They only serve to clutter and complicate the permit. Bunge requests to change Condition 16.b to read Upon written request from Illinois EPA to perform emission testing the permittee shall perform the requested testing using a qualified independent testing service. Bunge further requests that conditions 17 and 18 be removed from the permit as they now

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serve no purpose.

- If, however, it is Illinois EPA intention to require Method 22 and Method 5 testing on 136 emission units within 90 days of the FESOP being issued, Bunge feels this is an unrealistic expectation and objects to this requirement.
- If Condition18 is not removed as requested as requested above, Bunge provides the following comments on Condition 18
- On page 28 of 35, Condition 18.a.i.: This condition contains the statement Thereafter, this testing shall be conducted on a quarterly basis. This requirement is inconsistent with the requirement to test based on a written request by Illinois EPA. Bunge request that this statement be removed from the permit.
- On page 29 of 35, Condition 18.a.ii.: This condition contains the statement Thereafter, this testing shall be conducted at least once every five years. This requirement is inconsistent with the requirement to test based on a written request by Illinois EPA. Bunge request that this statement be removed from the permit.
- On page 29 of 35, Condition 18.c: This condition requires a written test plan be submitted to Illinois EPA stating that this plan shall include at a minimum:

  i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;
  ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;
  iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;
  iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;
  v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;
  vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification
  vii. Any proposed use of an alternative test method, with detailed justification
  viii. The format and content of the Source Test Report.

  Bunge is concerned that these conditions are not consistent with regulations promulgated by the Illinois Pollution Control Board, specifically 35 IAC 283.220. 35 IAC 283.220(c) specifies what is required to be in a test plan. It states that a test plan must specify:
  - The purpose of the test,
  - The operating parameters,
  - The test method, and
  - Any other procedures that will be followed when conducting an emissions test

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Danville, IL 61832

pursuant to the provisions of this Part.
Furthermore, 35 IAC 283.220(d) states that a test plan need not be submitted where the source intends to use a standard test method or procedure.

Bunge requests that Condition 18.c be amended so that the required content of a test plan is consistent with what is required by the regulation and add language to incorporate the part of the regulation that allows for circumstances when a test plan is not required.

11) On page 33 of 35, Conditions 23.a.ix and 23.a.x: These conditions are related to the daily emission calculations required by Condition 12.f. Bunge requested in a previous comment to amend Condition 12.f to be a monthly requirement. Accordingly, Bunge requests that these conditions be similarly amended, Condition 23.a.ix should change hours/day to hours/month and Condition 23.a.x should change Daily to Monthly.

Our comments present numerous concerns with the proposed FESOP permit. Because it is Bunge's desire to comply with the permit and the permit conditions it is not unreasonable to expect the conditions to be succinct, reasonable, and supported by regulation. Thank you for your careful consideration of our comments.

Please contact me at (314) 292-2937 or by email at james.burris@bunge.com if you have any questions.

Sincerely,

James A Burris Jr

James A. Burris, Jr. PE
Environmental Specialist

Enclosure: Redlined version of the public notice version of the proposed FESOP permit.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn ~~, Soybean & Products~~ Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters ~~APH-40072.16~~;
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters ~~HOFFMAN-48X96~~;

West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse ~~s~~ Filters ~~DD-484R12~~;
~~Railcar Dump Pit and Section D & E General Aspiration (5012-0007-0015) controlled by Baghouse Filters~~ ~~Railcar Dump Pit and D & E General Aspiration (5012-0004-0015) controlled by Baghouse Filters 37AF8; and~~
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters ~~HOFFMAN-48X96~~;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters ~~BUHLER 18S-6-39~~;

Corn ~~, Soybean & Products~~ Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters ~~DD-484R12~~;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters ~~APH-41216.12~~;
Bldg 115 Corn Cleaning ~~Bldg 115~~ (4880-0034-0069) controlled by Baghouse Filters ~~DD-484R12~~;
North Street ~~Grain/Heat~~ Truck Dump ~~Pit~~ #2 (5012-0002-0012) controlled by Baghouse
Filters ~~DD-48R12~~;

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2125 S. First Street, Champaign, IL 61820 (217) 278-5800
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000
595 S. State Street, Elgin, IL 60123 (847) 608-3131
2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

PLEASE PRINT ON RECYCLED PAPER

Dry Corn Milling, Processing and Products Handling:

Bemos Bagging (4870-0010-0055) controlled by Baghouse Filters APH-14019.8;

-Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APH-14020.8;

Bagging Packer General Aspiration (4870-0013-0019), controlled by Baghouse Filters-APH-14042.8;

Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APH-14036.8;

Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APH-14144.8;

East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APH-401.0.10;

West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APH-14144.8;

Bldg 105/115 General Aspiration (4880-0034-00270001) controlled by Baghouse Filters-DD-484RF12;

Bldg 102/105 General Aspiration (4880-0034-00270+) controlled by Baghouse Filters-HCF-144-75D;

Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters-HOFFMAN 3oX9o;

Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters-DD-484RF12;

Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters-HOFFMAN-38405A;

Bran Bin (4880-0042-0054) controlled by Baghouse Filters-BUHLER-16S-o-30;

South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters-CD-484RF1c;

South CD Screening (4880-0034-0042) controlled by Baghouse Filters-CD-484RF12;

North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD-484RF12;

North Lunchroom Screening.(4880-0034-0019) controlled by Baghouse Filters-CD 484RF12;

Pack and Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD-484RF12;

CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters-TD-484RF12;

Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters-TD-484RF12;

Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters-HOFFMAN S54002;

Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters-USS-INC. 15C--P/D;

Lab Filter (4932-0001-0001) controlled by Baghouse Filters-APH-14105.4;

1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER-9-6-100;

1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters-BUHLER-16-8-100;

3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER-9-6-100;

9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters-BUHLER-16009.4;

7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters-BUHLER-16009.4;

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Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters~~-BUHLER-37-8-220~~;

Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters~~-BUHLER 37-8-220~~;

Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters~~-APM-16072.8~~;

3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters~~-MICROPUL 2-1/2B~~;

1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters~~-MICROPUL 2-1/2B~~;

9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters~~-APM 16104.4~~;

7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters~~-APM-16104.4~~;

1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters~~-MICROPUL 2-1/2B~~;

3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters~~-MICROPUL 2-1/2B~~;

7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters~~-APM 16104.4~~;

9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters~~-APM 16104.4~~;

HibondIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters~~-APM-15066.8~~;

CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters~~-APM-40070.7~~;

Blended Food Packaging Aspiration (4820-0001-0052) controlled by Baghouse Filters~~-APM 16150.6~~;

~~ALLBOND~~-Allbond Visc- Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters~~-BUHLER 16-8-100~~;

Milk Bins (4820-0003-0007) controlled by Baghouse Filters~~-MICROPUL 6B~~;

300 Series Binning (4990-0007-0049) controlled by Baghouse Filters~~-MICROPUL 1F1~~;

Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters~~-APM 16022.4~~;

Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters~~-MICROPUL 6B~~;

Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters~~-APM-400072.10~~;

3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters~~-APM16014.8~~;

Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters~~-APM-16009.8~~;

5/6 Allbond Receiver (4900-0001-0058) controlled by Baghouse Filters~~-APM-16014.8~~;

7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters~~-APM-16014.8~~;

Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters~~-MICROPUL 6B~~;

9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters~~-BUHLER 16-6-220~~;

Milk Bins (4820-0002-0038)-controlled by Baghouse Filters~~-MICROPUL 21-6-220~~;

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Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters ~~BUHLER 25S-5-30~~;
Blendinger General Aspiration (4990-0007-0036) controlled by Baghouse Filters ~~BUHLER 16S-6-30~~;
Blendinger General Aspiration (4990-0007-0032) controlled by Baghouse Filters ~~MICROPUL 36S-8-30~~;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters ~~BUHLER 64S-8-20~~;
Finished Product General Aspiration (4990-0006-0040) controlled by Baghouse Filters ~~BUHLER 9-8-220~~;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters ~~APM 14024.6~~;
Fiber Receivinger General Aspiration (4990-0011-0001) controlled by Baghouse Filters ~~BUHLER 9-8-220~~;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters ~~MICROPUL 1F1~~;
~~CF~~ Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters ~~MICROPUL 25-8-220~~;
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters ~~HOFFMAN 60X120~~;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters ~~APM 16030.4~~;
Fiber Receivinger General Aspiration (4990-0011-0029) controlled by Baghouse Filters ~~APM 16019.1~~;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters ~~APM 40072.10~~;
Four~~Two~~ (42) Ingredient Bins (601 (4820-0003-0022), ~~) and~~ 602 (4820-0003-0026), 603 (4820-0003-0030), and 604 (4820-0003-0034)~~)~~ controlled by Baghouse Filters ~~MICROPUL 43~~;
~~Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 S;~~
~~Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4;~~
Micro Ingredient Dump Aspiration~~Filter~~ (4820-0003-0018) controlled by Baghouse Filters ~~APM 15105.4~~;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters ~~BUHLER 25S-5-30~~;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters ~~APM 16009.5~~;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters ~~APM 16099.6~~;
Reprocessing General ~~Cooler-Dryer-Roof~~Aspiration (4900-0005-0001) controlled by Baghouse ~~Filters CD-376RF10~~;
#6 ~~Pulverizer Grinder~~Pulvocron (4900-0001-0042) controlled by Baghouse Filters ~~BUHLER 37-8-220~~;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters ~~MICROPUL 43~~;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters ~~BUHLER 16S-6-30~~;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters ~~APM 16027.8~~;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters ~~APM 16014.8~~;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters ~~MICROPUL 2 1/2B~~;
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters ~~HOFFMAN 36X96~~;

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AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters ~~BUHLER 37-8-720~~;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters ~~CD-484RF12~~;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filters ~~MICROPUL 1F2~~;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters ~~APW-15030.8~~;
Bran Dryer (4860-0024-0003) controlled by ~~Corona~~ Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filters ~~WSTDENMAN-L2T-2X7~~;
Germ Dust Aspiration (4860-0017-0073) controlled by ~~Baghouse Filters APW 40120.8~~Cyclone;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filters ~~APW-40120.8~~;
Germ Dryer (4860-0017-0003) controlled by Cyclone~~DAY-CYCLONE HV56~~;
FTS Dryer Aspiration (4860-0019-0003) controlled by ~~CORONA 15-CYCLONE~~Cyclone;
~~-~~Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse
Filters ~~MICROPUL~~;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260) (4880-0048-0012);
PCM Hammermill (4900-0003-0011) -controlled by Filter ~~System (78-03:11)~~;
USG Hammermill (4900-0008-0027) controlled by Filter ~~System (78-03:27)~~;
USG ~~Extruder Pellet~~Secondary Extruder Transfer ~~controlled by Collection Cyclone (78-98:22)~~ (4900-0008-0022);
Whole Grain Dryer (4880-0046-0017);
Whole Grain Hammermill (4880-0046-0028);
Whole Grain Aspiration (4880-0046-0042);
USG Primary Extruder Transfer (4900-0007-0020);
6th Floor Radar Pulsar (4860-0018-0044);

~~One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:58) (17,000 dscfm) controlled by the S-105 Roof Carter-Day Filter (334:86);~~
~~One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (05:88) (17,000 dscfm) controlled by the S-105 Roof Carter-Day Filter (334:86);~~
~~One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S-105 Roof Carter-Day Filter (334:86);~~
~~One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S-105 Roof Carter-Day Filter (334:86);~~
~~One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S-105 Roof Carter-Day Filter (334:86);~~
~~One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S-105 Roof Carter-Day Filter (334:86);~~
~~Satake Sifter and Sifter Air Locks controlled by the S-105 Roof Carter-Day Filter (334:86);~~CCM260 Process Aspiration (4912-0002-0054) controlled by Filter;
~~One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S-105 Roof Carter-Day Filter (334:86);~~
~~One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S-105 Roof Carter-Day Filter (334:86);~~

Corn Mill Products Storage:
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters ~~HOFFMAN 36X96~~;

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Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters ~~HOFFMAN 36X96~~;
Hominy Feed Bins Aspiration (~~4750-0029-0074~~4860-0018-0048) controlled by Baghouse Filters ~~DONALDSON 276PW12~~;

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Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters ~~APV 40240.8~~;

Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters ~~APM-49224.4~~;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters ~~376RF8~~;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters ~~376RF12~~;
~~Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8;~~
~~LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144WCF415;~~
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters ~~MICROPUL 100S-6-20~~;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NO_x Burner (Boiler #1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM_{10} emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating and construction permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn ~~, Soybean & Products~~ Receiving, Cleaning and Storage (NSPS) emission units except the Hoffman Bldg 301 Vacuum and the Track 6 Vacuum are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. ~~.~~ Pursuant to 40 CFR 60. ~~300~~(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility ~~d~~

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~~facility~~ at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). ~~——~~The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations. 40 CFR Part 60 Subpart DD does not apply to the emission units in the Corn Receiving, Cleaning and Storage (Pre-NSPS) emission unit group.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

   i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

   ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

   i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

   ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

   iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn, ~~Soybean & Products~~ Receiving, Cleaning and Storage (Pre-NSPS); Corn, ~~Soybean & Products~~ Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122 or as allowed under 35 Ill. Adm. Code 212.123(b). ~~.~~

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute

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period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn, ~~Soybean & Products~~ Receiving, Cleaning and Storage (Pre-NSPS); Corn, ~~Soybean & Products~~ Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn, ~~Soybean & Products~~ Receiving, Cleaning and Storage (Pre-NSPS); Corn, ~~Soybean & Products~~ Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause

or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn~~, Soybean & Products~~ Receiving, Cleaning and Storage (Pre-NSPS); Corn~~, Soybean & Products~~ Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency

of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn, ~~Soybean & Products~~ Receiving, Cleaning and Storage (Pre-NSPS); Corn, ~~Soybean & Products~~ Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), initial compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner

consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

~~g. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.~~

~~h. The Illinois EPA shall be allowed to sample all fuels stored at the above location.~~

~~f.~~q. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on ~~the Financial~~the Bunge Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis.
All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(j~~i~~).

~~g.~~h. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

~~h.~~i. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

~~i.~~j. The emission units described in Conditions 11(g~~j~~), (h~~i~~), and (i~~k~~) shall be operated under the provisions of an operating program, consistent with
35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

~~j.~~k. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

~~n.~~ l. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(l) and (m).

~~o.~~ m. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(l) and (m) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn~~, Soybean & Products~~ Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04

Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn, ~~Soybean & Products~~ Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Truck Dump #4 and~~,~~ Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg~~,~~ 115 Corn Cleaning North	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
Street ~~Truck~~ Truck	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

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These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19
Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General	0.002	0.0015	~~1355~~,300	0.9~~175~~	4.13	0.71~~56~~	3.10

Aspiration							
Bldg 102/105 General Aspiration	0.002	0.0015	~~55,0~~43,700	0.~~9~~75	3.28~~4.13~~	0.5~~071~~	
Bldg 105 Vacuum	0.001~~.10~~	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack and~~s~~ Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food	0.002	0.0015	4,077	0.07	0.31	0.05	0.23

Receiver Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02

300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04
#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
PCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08
Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
Ingredient Bin 601	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 602	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 603	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 604	0.002	0.0015	210	0.004	0.02	0.003	0.01
Micro Ingredient Dump Aspiration	0.002	0.0015	2,500	0.04	0.19	0.03	0.14
Mixer General Aspiration	0.002	0.0015	1,500	0.03	0.11	0.02	0.08

3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#~~5~~ Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04
Viscosity Flour Receiver	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0.01	0.02	0.01	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grinding	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kice Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.5~~10~~
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.4~~900~~
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.4~~900~~
USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	~~3.0200~~
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42
CCM260 Process Aspiration(S 105 Carter-Day)	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Compliance with the annual limits in Conditions 12(a) through 12(e) of this permit shall be determined on a ~~daily~~ monthly basis and compliance demonstrated on a 12-month rolling basis. ~~from the sum of the data for the current day plus the preceding 364 days (running 365 days total).~~

g. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52

Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

h. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

i. Compliance with the annual limits in Condition 12(g) and (h) of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

~~14a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 63.6(a)(1), (a)(2), (a)(3), and (a)(4), or such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of each facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).~~

~~b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA~~

iv. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology.

v. Approves the use of an equivalent method.

vi. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance.

vii. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard, or

viii. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

e. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

f. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

g. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be

accessibly determined by applicable test methods and procedures; and

5. Provides a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

t. Safe sampling platform(s).

u. Safe access to sampling platform(s).

v. Utilities for sampling and testing equipment.

r. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

q. Pursuant to 40 CFR 60.11(e)(5), except as provided in 40 CFR 60.11(e)(6), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

ii. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(a).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at

~~least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.~~

~~ii. Method 2 shall be used to determine the ventilation volumetric flow-rate.~~

~~iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.~~

~~e. Pursuant to 40 CFR 60.284(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.284. For Method 5, Method 17 may be used.~~

16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. ~~Testing required by Conditions 17 and 18 shall be performed u~~Upon a written request from the Illinois EPA to perform emissions testing, the Permittee shall perform the requested testing ~~by~~ using a qualified independent testing service.

~~17a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the~~

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discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart J shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the presence of uncombined water when applied to 35 Ill. Adm. Code 212.123 and 212.124, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.11(e) and (f), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three rather than 24-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1, 5Ba, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within sixty (60) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

[deleted] Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Wet Products Storage; and Corn Wet Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted on a quarterly basis no later than 10 days after the end of the preceding calendar quarter.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Wet

Products Storage) and Coal Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions unless another method is approved by the Illinois EPA(refer to 40 CFR 60, Appendix A for USEPA test methods):

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing agency(ies) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the sampling in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be

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~~representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operation parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;~~

~~v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;~~

~~vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;~~

~~vii. Any proposed use of an alternative test method, with detailed justification; and~~

~~viii. The format and content of the Source Test Report.~~

~~d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.~~

~~e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.~~

f. ~~The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:~~

~~i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;~~

~~ii. A summary of results;~~

~~iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;~~

~~iv. Detailed description of test conditions, including:~~

~~A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);~~

~~B. Control equipment information (i.e., equipment condition and operating parameters) during testings; and~~

~~C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repairs).~~

~~V. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;~~

~~VI. An explanation of any discrepancies among individual tests, failed tests or anomalous data;~~

~~VII. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and~~

~~VIII. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.~~

19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

20a. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If

relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 11(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/~~day~~ month and hours/year);

viii. Monthly~~Daily~~ and annual emissions of PM, and PM_{10} from the source with supporting calculations (tons/month and tons/year).

ix. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

x. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year); and

xi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the combustion of natural gas, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 23(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

24. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

25. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

i. Via mail or overnight delivery:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. and electronically:

epa.boa.smu@illinois.gov

It should be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i) and the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3)

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

Barria, German

From: DoNotReply.EJRequest@illinois.gov
Sent: Thursday, December 29, 2022 12:03 PM
To: Metz, Cassandra; Frost, Brad; Pressnall, Chris; Herr, Alane; Mensah, James; Barria, German
Subject: EJ Release Requested for Bunge Grain Milling Inc | 183020ABT | 96020027 | Air

Permit section review is complete for (Bunge Grain Milling Inc).

EJ release is needed.

Barria, German

From:	DoNotReply.EJRequest@illinois.gov
Sent:	Thursday, December 29, 2022 1:13 PM
To:	Metz, Cassandra; Frost, Brad; Pressnall, Chris; Herr, Alane; Mensah, James; Barria, German
Subject:	Outreach Status Change for Bunge Grain Milling Inc | 183020ABT | 96020027 | Air

The EJ source (Bunge Grain Milling Inc) has moved forward in the outreach process on 12/29/2022.

The status has changed from *Outreach In Progress* to *Complete - With Outreach *.

Kras, Kim

From: Bernoteit, Bob
Sent: Thursday, December 29, 2022 1:56 PM
To: Barria, German
Subject: RE: Bunge North Anmerica - ID #183020ABT
Attachments: 96020027a - Bunge North Anmerica.docx

German,

I made a few minor corrections. Thank you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Thursday, December 29, 2022 11:54 AM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North Anmerica - ID #183020ABT

Bob this is the final draft of the FESOP after going through Bunge comments after notice.
If you are Ok with it, I will proceed to send it to typing and prepare the file.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
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JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: Expiration Date:
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filter;
Hoffman Bldg. 301 Vacuum (5012-0010-0054) controlled by Baghouse Filter;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filter;
Railcar Dump Pit and Section D & E General Aspiration (5012-0007-0015) controlled by Baghouse Filter;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filter;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filter;

Corn Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filter;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filter;
Bldg. 115 Corn Cleaning (4880-0034-0069) controlled by Baghouse Filter;
North Street Truck Dump #2 (5012-0002-0012) controlled by Baghouse Filter;

Dry Corn Milling, Processing and Products Handling:
Bemos Bagging (4870-0010-0055) controlled by Baghouse Filter;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filter;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filter;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filter;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filter;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filter;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filter;
Bldg. 105/115 General Aspiration (4880-0034-0001) controlled by Baghouse Filter;

Bldg. 102/105 General Aspiration (4880-0034-0027) controlled by Baghouse Filter;
Bldg. 105 Vacuum (4880-0032-0052) controlled by Baghouse Filter;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filter;
Bldg. 104 Vacuum (4870-0015-0016) controlled by Baghouse Filter;
Bran Bin (4880-0042-0054) controlled by Baghouse Filter;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filter;
South CD Screening (4880-0034-0042) controlled by Baghouse Filter;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filter;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filter;
Pack and Bulk Loading Bldg. 115 (4870-0013-0024) controlled by Baghouse Filter;
CAMAS/Bran Bldg. 115 (4880-0034-0077) controlled by Baghouse Filter;
Thru/Tail Stock Dryers Bldg. 115 (4880-0034-0071) controlled by Baghouse Filter;
Bldg. 115 Vacuum (4880-0032-0070) controlled by Baghouse Filter;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filter;
Lab Filter (4932-0001-0001) controlled by Baghouse Filter;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filter;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filter;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filter;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filter;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filter;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filter;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filter;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filter;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filter;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filter;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filter;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filter;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filter;
Hibond Visc Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filter;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filter;
Blended Food Packaging Aspiration (4820-0001-0052) controlled by Baghouse Filter;

Allbond Visc Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filter;
Milk Bins (4820-0003-0007) controlled by Baghouse Filter;
300 Series Binning (4990-0007-0049) controlled by Baghouse Filter;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filter;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filter;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filter;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filter;
Tri Cal Bins.(4820-0003-0072) controlled by Baghouse Filter;
5/6 Allbond Receiver (4900-0001-0058) controlled by Baghouse Filter;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filter;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filter;
Milk Bins (4820-0002-0038)controlled by Baghouse Filter;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filter;
Blending General Aspiration (4990-0007-0036) controlled by Baghouse Filter;
Blending General Aspiration (4990-0007-0032) controlled by Baghouse Filter;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filter;
Finished Product General Aspiration (4990-0006-0040) controlled by Baghouse Filter;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filter;
Fiber Receiving General Aspiration (4990-0011-0001) controlled by Baghouse Filter;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filter;
Bldg. 111 Vacuum (4900-0005-0035) controlled by Baghouse Filter;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filter;
Fiber Receiving General Aspiration (4990-0011-0029) controlled by Baghouse Filter;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filter;
Four (4) Ingredient Bins (601 (4820-0003-0022), 602 (4820-0003-0026), 603 (4820-0003-0030), and 604 (4820-0003-0034)controlled by Baghouse Filters;
Micro Ingredient Dump Aspiration (4820-0003-0018) controlled by Baghouse Filter;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filter;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filter;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filter;
Reprocessing General Aspiration (4900-0005-0001) controlled by Baghouse Filter;
#6 Pulvocron (4900-0001-0042) controlled by Baghouse Filter;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filter;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filter;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filter;

Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filter;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filter;
Bldg. 112 Vacuum (4900-0005-0029) controlled by Baghouse Filter;
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filter;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filter;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filter;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filter;
Bran Dryer (4860-0024-0003) controlled by Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filter;
Germ Dust Aspiration (4860-0017-0073) controlled by Cyclone;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filter;
Germ Dryer (4860-0017-0003) controlled by Cyclone;
FTS Dryer Aspiration (4860-0019-0003) controlled by Cyclone;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filter;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260) (4880-0048-0012);
PCM Hammermill (4900-0003-0011) controlled by Filter;
USG Hammermill (4900-0008-0027) controlled by Filter;
USG Secondary Extruder Transfer (4900-0008-0022);
Whole Grain Dryer (4880-0046-0017);
Whole Grain Hammermill (4880-0046-0028);
Whole Grain Aspiration (4880-0046-0042);
USG Primary Extruder Transfer (4900-0007-0020);
6th Floor Radar Pulsar (4860-0018-0044);
CCM260 Process Aspiration (4912-0002-0054) controlled by Filter;

Corn Mill Products Storage:
Bldg. 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filter;
Bldg. 208 Vacuum (4912-0009-0005) controlled by Baghouse Filter;
Hominy Feed Bins Aspiration (4860-0018-0048) controlled by Baghouse Filter;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filter;
Hominy Grind General Aspiration (4750-0029-0001) controlled by Baghouse Filter;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filter;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filter;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filter;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NOx Burner (Boiler#1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler); and

Fugitive PM and PM10 emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60. 300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212

Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^N$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to

the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits

pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the

wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code Part 212~~.314~~ Subpart K is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(~~i~~j).

h. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

i. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

j. The emission units described in Conditions 11(~~i~~g), (~~j~~h), and (~~k~~i) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

k. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

l. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(~~l~~j) and (~~m~~k).

m. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(~~l~~j) and (~~m~~k) and shall be submitted to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04
Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Truck Dump #4 and Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg. 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North Street Truck Dump Pit #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19

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Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General Aspiration	0.002	0.0015	55,000	0.94	4.13	0.71	3.10
Bldg 102/105 General Aspiration	0.002	0.0015	43,700	0.75	3.28	0.56	2.26
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Back & Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03

7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food Receiver	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02
300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04
#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
FCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08

Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
Ingredient Bin 601	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 602	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 603	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 604	0.002	0.0015	210	0.004	0.02	0.003	0.01
Micro Ingredient Dump Aspiration	0.002	0.0015	2,500	0.04	0.19	0.03	0.14
Mixer General Aspiratior	0.002	0.0015	1,500	0.03	0.11	0.02	0.08
3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04
Viscosity Flour Receiver	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0	0.02	0	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grinding	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kibe Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.02
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.51
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.49
USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	0.49
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42

CM260 Process Aspiration(S 105 Carter-Day)	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	E M I S S I O N S PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

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These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Compliance with the annual limits in Conditions 12(a) through 12(e) of this permit shall be determined on a daily basis from the sum of the

data for the current day plus the preceding 364 days (running 365 days total).

g. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52
Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

h. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

i. Compliance with the annual limits in Condition 12(g) and (h) of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from

this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

14a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to

operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason

for not conducting the opacity observations concurrent with the initial performance test.

15a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

17a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

18a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted on a quarterly basis no later than 30 days after the end of the preceding calendar quarter.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: (refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

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c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:
   A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

   B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

   C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

20a. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 11(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/day and hours/year);

viii. Daily and annual emissions of PM, and PM_{10} from the source with supporting calculations (tons/month and tons/year).

ix. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

x. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year); and

xi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the combustion of natural gas, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 23(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

24. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature

of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

25. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

i. Via mail or overnight delivery:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. and electronically:

epa.boa.smu@illinois.gov

It should be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i) and the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3)

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:[illegible]

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	-10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

Kras, Kim

From: Barria, German
Sent: Thursday, December 29, 2022 2:20 PM
To: Bernoteit, Bob
Subject: RE: Bunge North Anmerica - ID #183020ABT
Attachments: Danville - Bunge Comments on Public Notice FESOP letter - IEPA Resp - 12-29-2022.pdf

Bob,

I try to answer or put a comments to each of Mr. Burris comments in the pdf doc. Attached.
I'm not sending this. Just to see as to how shall we respond to his comments.

German Barria
Environmental Protection Specialist.
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Thursday, December 29, 2022 1:56 PM
To: Barria, German <German.Barria@Illinois.gov>
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I made a few minor corrections. Thank you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

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Bob this is the final draft of the FESOP after going through Bunge comments after notice.
If you are Ok with it, I will proceed to send it to typing and prepare the file.

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof,

including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

BUNGE

Bunge North America, Inc.
321 E. North Street
Danville, IL 61832

September 2, 2022

Cassandra Metz
Office of Community Relations
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794

Re: Comments on Public Notice Federally Enforceable State Operating Permit (FESOP)
Bunge Milling, Inc – Danville Facility
Source ID No. 183020ABT

Dear Ms. Metz:

Bunge submits this letter to provide comments on the proposed Federally Enforceable State Operating Permit (FESOP), Application No. 96020027, for the Bunge Milling, Inc. facility located in Danville, Illinois, facility ID No. 183020ABT.

Bunge has reviewed the public notice version of the proposed permit and has serious concerns about some of the language and permit conditions. Bunge looks forward to the agencies' careful consideration of our comments below.

1) On pages 1 through 6 of 35, List of Emission Unit for which the permit is issued:
   - Listing the specific baghouse model numbers in the FESOP is not necessary and provides no benefit to the permit. Under 35 IAC 201.146(hhh) replacement of air pollution control equipment is exempted from the requirement to obtain a construction permit. Therefore, when a baghouse is replaced with a different model baghouse the model number will not match what is listed in the FESOP. Bunge requests that reference to a specific baghouse model numbers be removed from the description of each emission unit. *Example: Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filter ~~APM 40072.10~~* in regard to this changes, they have been implemented
   - Bunge reviewed the list of emission units and discovered some emission unit ID numbers and unit descriptions that are not accurate. Bunge request that the emission unit ID numbers and unit descriptions be updated to reflect the changes listed below. Some of these changes are to standardize the naming convention for emission units at the facility, some are to correct inaccuracies, and some are to allow the emission unit names to match emission unit names used in conditions 12a, 12b and 12c of the permit. See the redlined copy of the FESOP for a complete list of updated emission unit numbers and names. Some emission units were removed in the redlined version of the permit either because they are already included in the list as part of another emission unit or no longer exist at the facility. the list of emission units were revised per your comments
     - Railcar Dump Pit and Section D & E General Aspiration (5012-0007-0015) controlled by Baghouse Filter
     - Truck Dump #4 and West Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filter
     - Bldg 115 Corn Cleaning (4880-0034-0069) controlled by Baghouse Filter
     - North Street Truck Dump #2 (5012-0002-0012) controlled by Baghouse Filter

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- Bldg 105/115 General Aspiration (4880-0034-0001) controlled by Baghouse
- Filter
- Bldg 102/105 General Aspiration (4880-0034-0027) controlled by Baghouse
- Filter
- Pack and Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filter
- 3/4 Pulvocron Meal Bin (4990-0002-0008) controlled by Baghouse
- Filter
- 1/2 Pulvocron Meal Bin (4990-0005-0010) controlled by Baghouse
- Filter
- 9/10 Pulvocron Meal Bin (4990-0004-0011) controlled by Baghouse
- Filter
- 7/8 Pulvocron Meal Bin (4990-0003-0008) controlled by Baghouse Filter
- Hibond Visc Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filter
- Blended Food Packaging Aspiration (4820-0001-0052) controlled by Baghouse Filter
- Allbond Visc Flour General Aspiration (4900-0001-0068) controlled by
- Baghouse Filter
- 5/6 Allbond Receiver (4900-0001-0058) controlled by Baghouse Filter
- Blending General Aspiration (4990-0007-0036) controlled by Baghouse Filter
- Blending General Aspiration (4990-0007-0032) controlled by Baghouse Filter
- Finished Product General Aspiration (4990-0006-0040) controlled by Baghouse Filter
- Fiber Receiving General Aspiration (4990-0011-0001) controlled by Baghouse Filter
- Fiber Receiving General Aspiration (4990-0011-0029) controlled by Baghouse Filter
- Four (4) Ingredient Bins (601 (4820-0003-0022), 602 (4820-0003-0026), 603 (4820-0003-0030), and 604 (4820-0003-0034)controlled by Baghouse Filters
- Micro Ingredient Dump Aspiration (4820-0003-0018) controlled by Baghouse Filter
- Reprocessing General Aspiration (4900-0005-0001) controlled by Baghouse Filter
- #6 Pulvocron (4900-0001-0042) controlled by Baghouse Filter
- Germ Dust Aspiration (4860-0017-0073) controlled by Cyclone (not by a Filter)
- Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260) (4880-0048-0012)
- PCM Hammermill (4900-0003-0011) controlled by Filter
- USG Hammermill (4900-0008-0027) controlled by Filter
- USG Secondary Extruder Transfer (4900-0008-0022) (no control)
- Whole Grain Dryer (4880-0046-0017)
- Whole Grain Hammermill (4880-0046-0028)
- Whole Grain Aspiration (4880-0046-0042)
- USG Primary Extruder Transfer (4900-0007-0020)
- 6th Floor Radar Pulsar (4860-0018-0044)
- Hominy Feed Bins Aspiration (4860-0018-0048) controlled by Baghouse Filter
- Hominy Grind General Aspiration (4750-0029-0001) controlled by Baghouse Filter

2) On page 6 of 35, Condition 1.c.: There are numerous construction permits have been issued to the facility that have emission limits or conditions that could conflict with conditions in the FESOP or no longer apply but are still enforceable. Bunge requests that this condition be amended to include all operating permits and construction permits.

this is an operating permit and addresses operation.

3) On page 6 of 35, Condition 3.a.:
   - This condition states that Products Receiving is subject to the NSPS for Grain Elevators. Only Grain Receiving is subject to the NSPS for Grain Elevators not all

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Product Receiving. Bunge requests that the words Products Receiving be removed from this condition. Bunge also no longer receives soybeans at this facility. The vacuum systems listed are not subject to the NSPS. The condition should read Corn Receiving, Cleaning and Storage. this revision was implemente throughout the permit.

- This condition lists the affected facilities to which the NSPS applies but does not specify which emission units at the facility are subject to the NSPS. Bunge requests that this condition be amended to state that the emission units included in the Corn Receiving, Cleaning and Storage (NSPS) emission unit group are subject to the Grain Elevator NSPS, subpart DD while the emission units in the Corn Receiving, Cleaning and Storage (Pre-NSP) emission unit group are not.

this was not implemented. this is already clarify in the emission units listing

4) On page 7 of 35, Condition 4.a.: Bunge request that the exception to 35 IAC 212.123(a) be referenced. That is, include the clause ...or as allowed under 35 IAC 212.123(b).

this is regulatory language and it wasn't change.

5) On page 15 of 35, Condition 9.a.: This condition states that compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60. It is not clear in the condition that this requirement refers to the initial compliance demonstration. Bunge requests that the condition be amended to state that initial compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60. this is regulatory language and it wasn't change

6) On page 17 of 35, Condition 11.g, 11.h and 11.i.: These conditions appear to be artifact conditions from a permit for a different facility used as a template for Bunge's FESOP and were inadvertently left in the permit or contain references to the prior facility.
   - Condition g references using liquid by-products or waste materials as fuel sources. The two permitted boilers at the Bunge facility can only burn natural gas. Bunge requests that this condition be removed. this was implemented
   - Condition h allows Illinois EPA the right to sample all fuels stored at the facility. Bunge does not store any fuels at the facility. Bunge requests that this condition be removed.
   - Condition i references the Ag Transload Facility. Bunge believes this should say the Bunge Facility. Bunge request that the condition be amended to replace Ag Transload Facility with Bunge Facility. this was implemented
   - Lettering of condition i (now g) and l (now j) should be modified to account for conditions g and h being removed. this wqas implemented

7) On pages 18 through 23 of 35, Conditions12.a, 12.b, and 12.c:
   - Emission unit name and emission rate changes: the emission units and and emission correction were implemented
     - Bldg 105/115 General Aspiration 0.002, 0.0015, 55,000, 0.94, 4.13, 0.71, 3.10
     - Bldg 102/105 General Aspiration 0.002, 0.0015, 43,700, 0.75, 3.28, 0.56, 2.46
     - #5 Pulvocron should be #6 Pulvocron
     - Bldg 112 Vacuum hourly emission rates should be 0.01 lb/hr, not zero
     - Pneumatic Lift Receiver for WG260 Transfer, PM10 emission rate should be 0.51 tpy
     - PCM Hammermill, PM10 emission rate should be 0.49 tpy
     - USG Hammermill, PM10 emission rate should be 0.49 tpy
     - USG Secondary Extruder Transfer, PM10 emission rate should be 3.00 tpy

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8) On page 23 of 35, Condition 12.f.: This condition requires the facility to monitor and record data from 136 emission units on a daily basis and calculate daily emission from each emission unit so that a 365-day rolling emission total from each emission unit can be used to demonstrate compliance with annual emission limits on each emission unit on a daily basis. It is unrealistic to expect the facility to perform daily and 365-day emission calculations to demonstrate compliance with annual limits. Except for the fugitive emission sources, the annual emission limits are based on 8760 hour per year of operation. In lieu of recording actual hours per day each emission unit operated, if Bunge were to assume each emission unit operated 24 hour per day 365 days per year the resulting emissions calculated would demonstrate compliance with the limits. Performing daily emission calculation for the point source emissions provides no benefit. For the three fugitive emission sources, Bunge proposes that monthly and 12-month rolling emission calculations would be sufficient to demonstrate compliance with these annual emission limits. Bunge requests that the conditions be amended to say that compliance with the annual limits in Conditions 12(a) through 12(e) be determined on a monthly basis and compliance determined on a 12-month rolling basis. this requirements were not removed, source limits above 90%

9) On pages 24 through 27, Conditions 14 and 15.: Conditions 14 and 15 are related to performance testing required by NSPS 40 CFR Part 60 regulations. Conditions 14 and 15 restate the methods for performing performance tests under 40 CFR Part 60. Two NSPS 40 CFR subparts apply to the Bunge facility; Subpart Dc for natural gas fired boiler between 10 and 100 MMBtu/hr and Subpart DD for grain elevators. Only Subpart DD contains any performance testing that would apply to any emission unit at the Bunge facility and then only for new, modified, or reconstructed emission units that are also affected facilities under Subpart DD. Adding a new Subpart DD emission unit, reconstructing, or modifying (as defined by Part 60) a Subpart DD emission unit would require an air construction permit. Any performance testing necessary should be addressed in the construction permit. Having these conditions in the FESOP provides no benefit they only serve to clutter and complicate the permit. Bunge expects a permit with only relevant permit conditions so reading and understanding each condition and compliance obligations are as easy as possible. For these reasons Bunge request the conditions 14 and 15 be removed from the permit. these conditions stay

10) On pages 27 and 28, Conditions 16.b. and 18.a.: Condition 16.b states testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA. Condition 18.a. states that within 90 days after the issuance of this permit the permittee shall i conduct Method 22 testing on all 136 emission units, and ii conduct Method 5 testing on all 136 emission units. These two conditions conflict.
    - Bunge believes that it is Illinois EPA intention to require testing to be performed upon written request. If this is the case the written request should identify the emission unit required to be tested, the purpose of the test, the test Methods to be used and any further testing instruction such as test duration or test frequency. There is no need to complicate the FESOP by having conditions 17 or 18 in the permit. They only serve to clutter and complicate the permit. Bunge requests to change Condition 16.b to read Upon written request from Illinois EPA to perform emission testing the permittee shall perform the requested testing using a qualified independent testing service. Bunge further requests that conditions 17 and 18 be removed from the permit as they now

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321 E. North Street
Danville, IL 61832

serve no purpose. this statyed

- If, however, it is Illinois EPA intention to require Method 22 and Method 5 testing on 136 emission units within 90 days of the FESOP being issued, Bunge feels this is an unrealistic expectation and objects to this requirement. this stayed
- If Condition18 is not removed as requested as requested above, Bunge provides the following comments on Condition 18 this stayed
- On page 28 of 35, Condition 18.a.i.: This condition contains the statement Thereafter, this testing shall be conducted on a quarterly basis. This requirement is inconsistent with the requirement to test based on a written request by Illinois EPA. Bunge request that this statement be removed from the permit. this stayed
- On page 29 of 35, Condition 18.a.ii.: This condition contains the statement Thereafter, this testing shall be conducted at least once every five years. This requirement is inconsistent with the requirement to test based on a written request by Illinois EPA. Bunge request that this statement be removed from the permit. this stayed
- On page 29 of 35, Condition 18.c: This condition requires a written test plan be submitted to Illinois EPA stating that this plan shall include at a minimum:

these all conditions stayed

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;
ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;
iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;
iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;
v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;
vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification
vii. Any proposed use of an alternative test method, with detailed justification
viii. The format and content of the Source Test Report.

Bunge is concerned that these conditions are not consistent with regulations promulgated by the Illinois Pollution Control Board, specifically 35 IAC 283.220. 35 IAC 283.220(c) specifies what is required to be in a test plan. It states that a test plan must specify:

- The purpose of the test,
- The operating parameters,
- The test method, and
- Any other procedures that will be followed when conducting an emissions test

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Bunge North America, Inc.
321 E. North Street
Danville, IL 61832

pursuant to the provisions of this Part.
Furthermore, 35 IAC 283.220(d) states that a test plan need not be submitted where the source intends to use a standard test method or procedure.

Bunge requests that Condition 18.c be amended so that the required content of a test plan is consistent with what is required by the regulation and add language to incorporate the part of the regulation that allows for circumstances when a test plan is not required.

11) On page 33 of 35, Conditions 23.a.ix and 23.a.x: These conditions are related to the daily emission calculations required by Condition 12.f. Bunge requested in a previous comment to amend Condition 12.f to be a monthly requirement. Accordingly, Bunge requests that these conditions be similarly amended, Condition 23.a.ix should change hours/day to hours/month and Condition 23.a.x should change Daily to Monthly. source limits are at 90% or above

Our comments present numerous concerns with the proposed FESOP permit. Because it is Bunge's desire to comply with the permit and the permit conditions it is not unreasonable to expect the conditions to be succinct, reasonable, and supported by regulation. Thank you for your careful consideration of our comments.

Please contact me at (314) 292-2937 or by email at james.burris@bunge.com if you have any questions.

Sincerely,

James A Burris Jr

James A. Burris, Jr. PE
Environmental Specialist

Enclosure: Redlined version of the public notice version of the proposed FESOP permit.

Kras, Kim

From: Bernoteit, Bob
Sent: Thursday, December 29, 2022 2:52 PM
To: Barria, German
Subject: RE: Bunge North Anmerica - ID #183020ABT

Comment #1: The listing of emission units has been revised per your request.

Comment #2: Construction permits in Illinois cannot be superseded by an operating permit. This condition is intended to mean that this FESOP supersedes the prior CAAPP permit and all previous state operating permits issued to the source.

Comment #3: Condition 3(a) has been revised to state that only the Corn Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD.

Comment #4: The requested change to Condition 4(a) would be a change to regulatory language. The exception from 35 Ill. Adm. Code 212.123(a) is already addressed in Condition 4(b).

Comment #5: The language in Condition 9(a) is taken from the underlying regulatory language.

Comment #6: Conditions 11(g) through (i) of the public notice draft permit have been removed. The conditions following the deleted conditions have been renumbered.

Comment #7: The proposed changes to the emission limits were not supported by the application that was submitted prior to the public notice and comment period. Any future increases to these permit limits need to be request via construction permit applications.

Comment #8: Because the permitted PM10 emissions of the source total to more than 95% of the major source threshold for the Clean Air Act Permit Program (CAAPP), the short term emission limits and recordkeeping must be on a daily basis to ensure that the source never exceeds the annual emission limits on a rolling basis (365 day total).

Comment #9: Under 40 CFR 60.8(a), the Illinois EPA or USEPA may request retesting of the emission units subject to the NSPS requirements.

Comment #10: Periodic testing of the emission units that have emissions of the pollutant of concern (i.e., for which the source is potentially major) and that are equipped with pollution controls is an expectation of the Illinois EPA, Bureau of Air. The period for such stack testing is to be not less than once every five years.

Comment #11: Daily recordkeeping of emissions and surrogate parameters (including throughputs and production rates) need to be on a daily basis to ensure that the source never exceeds the annual emission limits on a rolling basis (365 day total) because the emissions of PM10 are limited to more than 95% of the major source threshold for CAAPP.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

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Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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Kras, Kim

From: Barria, German
Sent: Thursday, December 29, 2022 3:25 PM
To: Bernoteit, Bob
Subject: RE: Bunge North Anmerica - ID #183020ABT

Thank you.
I have the file ready, will set it in your office for next week.
The response sure we hold on until next week as well.

Happy New Year, hope enjoy the weekend.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

Illinois Environmental
Protection Agency

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Sent: Thursday, December 29, 2022 2:52 PM
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Comment #8: Because the permitted PM10 emissions of the source total to more than 95% of the major source threshold for the Clean Air Act Permit Program (CAAPP), the short term emission limits and recordkeeping must be on a daily basis to ensure that the source never exceeds the annual emission limits on a rolling basis (365 day total).

Comment #9: Under 40 CFR 60.8(a), the Illinois EPA or USEPA may request retesting of the emission units subject to the NSPS requirements.

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Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Thursday, December 29, 2022 2:20 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: RE: Bunge North Anmerica - ID #183020ABT

Bob,

I try to answer or put a comments to each of Mr. Burris comments in the pdf doc. Attached.
I'm not sending this. Just to see as to how shall we respond to his comments.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Thursday, December 29, 2022 1:56 PM
To: Barria, German <German.Barria@Illinois.gov>
Subject: RE: Bunge North Anmerica - ID #183020ABT

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Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Thursday, December 29, 2022 11:54 AM

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Subject: Bunge North Anmerica - ID #183020ABT

Bob this is the final draft of the FESOP after going through Bunge comments after notice.
If you are Ok with it, I will proceed to send it to typing and prepare the file.

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Kras, Kim

From: Bernoteit, Bob
Sent: Thursday, December 29, 2022 3:31 PM
To: Barria, German
Subject: RE: Bunge North Anmerica - ID #183020ABT

We will send the response when the permit is issued.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Thursday, December 29, 2022 3:25 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: RE: Bunge North Anmerica - ID #183020ABT

Thank you.
I have the file ready, will set it in your office for next week.
The response sure we hold on until next week as well.

Happy New Year, hope enjoy the weekend.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Thursday, December 29, 2022 2:52 PM
To: Barria, German <German.Barria@Illinois.gov>
Subject: RE: Bunge North Anmerica - ID #183020ABT

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Kras, Kim

From: Barria, German
Sent: Wednesday, January 4, 2023 8:27 AM
To: Bernoteit, Bob
Cc: Paruchuri, Anupama; Bhakta, Vikash; Rovey, Bart
Subject: FW: Co. Proposed CCA - Bunge Milling (183020ABT) - 010323

Bob,

I did prepare the final of the FESOP to be issued, but I wondering does this ongoing issues with this CCA, affect the issuance of the operating permit.

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

-----Original Message-----
From: Paruchuri, Anupama <Anupama.Paruchuri@Illinois.gov>
Sent: Tuesday, January 3, 2023 5:53 PM
To: Bhakta, Vikash <Vikash.Bhakta@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>; Rovey, Bart <Bart.Rovey@illinois.gov>
Subject: RE: Co. Proposed CCA - Bunge Milling (183020ABT) - 010323

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Also, they need to start keeping Method 22 records unless there's a conflicting requirement elsewhere.

Bart - I think they're outside the timeframe to request a meeting, but it still may be worth asking them if they want one. Some of the issues could be easily addressed that way if the source is cooperative and competent.

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From: Kras, Kim <Kim.Kras@Illinois.gov>
Sent: Tuesday, January 3, 2023 2:08 PM
To: Paruchuri, Anupama <Anupama.Paruchuri@Illinois.gov>; Bhakta, Vikash <Vikash.Bhakta@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>; Rovey, Bart <Bart.Rovey@illinois.gov>
Cc: Mohr, Kent <Kent.Mohr@Illinois.gov>; Jones, Eric E. <Eric.E.Jones@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>; Zentz, Miriam <Miriam.Zentz@Illinois.gov>
Subject: Co. Proposed CCA - Bunge Milling (183020ABT) - 010323

Please submit comments to Bart Rovey by January 10, 2023.

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Kras, Kim

From: Bernoteit, Bob
Sent: Wednesday, January 4, 2023 11:19 AM
To: Barria, German
Subject: RE: Co. Proposed CCA - Bunge Milling (183020ABT) - 010323

No, it does not. Bill told us to get the FESOP out.

Were you preparing to send the response to comments on the draft permit?

Bob Bernoteit
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Cc: Mohr, Kent <Kent.Mohr@Illinois.gov>; Jones, Eric E. <Eric.E.Jones@Illinois.gov>; Marr, Bill <Bill.Marr@illinois.gov>; Zentz, Miriam <Miriam.Zentz@Illinois.gov>
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Kras, Kim

From: Barria, German
Sent: Wednesday, January 4, 2023 11:32 AM
To: Bernoteit, Bob
Subject: RE: Co. Proposed CCA - Bunge Milling (183020ABT) - 010323

Oh, what you send me as the response?
Sure I can send the email to Mr. Burris now

German Barria
Environmental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767

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Sent: Wednesday, January 4, 2023 11:19 AM
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Environmental Protection Specialist,
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Phone: 217-785-0767

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Kras, Kim

From: Barria, German
Sent: Wednesday, January 4, 2023 11:41 AM
To: James Burris
Cc: Bernoteit, Bob
Subject: Bunge North America - ID #183020ABT

Dear Mr. Burris,

IEPA has prepared the final FESOP permit (No. 96020027) and in response to your comments on the draft permit, here is our response to those comments:

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Kras, Kim

From: Bernoteit, Bob
Sent: Wednesday, January 4, 2023 11:47 AM
To: Metz, Cassandra
Cc: Barria, German
Subject: FW: Bunge North America - ID #183020ABT

Cassie,

Here is our response to the comments received on the draft FESOP for this source that were received during the public notice and comment period. We are preparing to issue the final FESOP shortly.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Barria, German <German.Barria@Illinois.gov>
Sent: Wednesday, January 4, 2023 11:41 AM
To: James Burris <James.Burris@bunge.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Subject: Bunge North America - ID #183020ABT

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Bunge Milling, Inc.
Attn: Paul Catterson
321 East North Street
Danville, Illinois 61832

Application No.: 96020027 I.D. No.: 183020ABT
Applicant's Designation: Date Received: December 5, 2011
Operation of: Corn Mill & Grain Elevator
Date Issued: January 4, 2023 Expiration Date: January 4, 2033
Source Location: 321 E. North Street, Danville, Vermilion County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Corn Receiving, Cleaning and Storage (Pre-NSPS):
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filter;
Hoffman Bldg. 301 Vacuum (5012-0010-0054) controlled by Baghouse Filter;
West Headhouse General Aspiration (5012-0005-0029) controlled by Baghouse Filter;
Railcar Dump Pit and Section D & E General Aspiration (5012-0007-0015) controlled by Baghouse Filter;
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filter;
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filter;

Corn Receiving, Cleaning and Storage (NSPS):
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filter;
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filter;
Bldg. 115 Corn Cleaning (4880-0034-0069) controlled by Baghouse Filter;
North Street Truck Dump #2 (5012-0002-0012) controlled by Baghouse Filter;

Dry Corn Milling, Processing and Products Handling:
Bemos Bagging (4870-0010-0055) controlled by Baghouse Filter;
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filter;
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filter;
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filter;
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filter;
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filter;
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filter;
Bldg. 105/115 General Aspiration (4880-0034-0001) controlled by Baghouse Filter;

Bldg. 102/105 General Aspiration (4880-0034-0027) controlled by Baghouse Filter;
Bldg. 105 Vacuum (4880-0032-0052) controlled by Baghouse Filter;
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filter;
Bldg. 104 Vacuum (4870-0015-0016) controlled by Baghouse Filter;
Bran Bin (4880-0042-0054) controlled by Baghouse Filter;
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filter;
South CD Screening (4880-0034-0042) controlled by Baghouse Filter;
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filter;
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filter;
Pack and Bulk Loading Bldg. 115 (4870-0013-0024) controlled by Baghouse Filter;
CAMAS/Bran Bldg. 115 (4880-0034-0077) controlled by Baghouse Filter;
Thru/Tail Stock Dryers Bldg. 115 (4880-0034-0071) controlled by Baghouse Filter;
Bldg. 115 Vacuum (4880-0032-0070) controlled by Baghouse Filter;
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filter;
Lab Filter (4932-0001-0001) controlled by Baghouse Filter;
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filter;
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filter;
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filter;
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filter;
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filter;
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters;
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters;
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters;
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filter;
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filter;
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filter;
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filter;
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filter;
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filter;
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filter;
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filter;
Hibond Visc Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filter;
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filter;
Blended Food Packaging Aspiration (4820-0001-0052) controlled by Baghouse Filter;
Allbond Visc Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filter;
Milk Bins (4820-0003-0007) controlled by Baghouse Filter;

300 Series Binning (4990-0007-0049) controlled by Baghouse Filter;
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filter;
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filter;
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filter;
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filter;
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filter;
5/6 Allbond Receiver (4900-0001-0058) controlled by Baghouse Filter;
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filter;
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters;
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filter;
Milk Bins (4820-0002-0038)controlled by Baghouse Filter;
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6;
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filter;
Blending General Aspiration (4990-0007-0036) controlled by Baghouse Filter;
Blending General Aspiration (4990-0007-0032) controlled by Baghouse Filter;
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filter;
Finished Product General Aspiration (4990-0006-0040) controlled by Baghouse Filter;
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filter;
Fiber Receiving General Aspiration (4990-0011-0001) controlled by Baghouse Filter;
PCM Binning (4820-0002-0011) controlled by Baghouse Filters;
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filter;
Bldg. 111 Vacuum (4900-0005-0035) controlled by Baghouse Filter;
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filter;
Fiber Receiving General Aspiration (4990-0011-0029) controlled by Baghouse Filter;
Cooling Tower (4990-0001-0029) controlled by Baghouse Filter;
Four (4) Ingredient Bins (601 (4820-0003-0022), 602 (4820-0003-0026), 603 (4820-0003-0030), and 604 (4820-0003-0034)controlled by Baghouse Filters;
Micro Ingredient Dump Aspiration (4820-0003-0018) controlled by Baghouse Filter;
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filter;
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filter;
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filter;
Reprocessing General Aspiration (4900-0005-0001) controlled by Baghouse Filter;
#6 Pulvocron (4900-0001-0042) controlled by Baghouse Filter;
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filter;
Pellet Bins (4900-0002-0032) controlled by Baghouse Filter;
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filter;
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filter;
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filter;
Bldg. 112 Vacuum (4900-0005-0029) controlled by Baghouse Filter;

AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filter;
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filter;
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filter;
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filter;
Bran Dryer (4860-0024-0003) controlled by Cyclone;
Track 16 Rail Loadout (4912-0006-0017) controlled by Baghouse Filter;
Germ Dust Aspiration (4860-0017-0073) controlled by Cyclone;
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filter;
Germ Dryer (4860-0017-0003) controlled by Cyclone;
FTS Dryer Aspiration (4860-0019-0003) controlled by Cyclone;
Pet Bran Kice Lites Aspiration (4860-0024-0037) controlled by Baghouse Filter;
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260) (4880-0048-0012);
PCM Hammermill (4900-0003-0011) controlled by Filter;
USG Hammermill (4900-0008-0027) controlled by Filter;
USG Secondary Extruder Transfer (4900-0008-0022);
Whole Grain Dryer (4880-0046-0017);
Whole Grain Hammermill (4880-0046-0028);
Whole Grain Aspiration (4880-0046-0042);
USG Primary Extruder Transfer (4900-0007-0020);
6th Floor Radar Pulsar (4860-0018-0044);
CCM260 Process Aspiration (4912-0002-0054) controlled by Filter;

Corn Mill Products Storage:
Bldg. 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filter;
Bldg. 208 Vacuum (4912-0009-0005) controlled by Baghouse Filter;
Hominy Feed Bins Aspiration (4860-0018-0048) controlled by Baghouse Filter;

Corn Mill Products Milling and Handling:
Hominy Binning (4750-0029-0032) controlled by Baghouse Filter;
Hominy Grind General Aspiration (4750-0029-0001) controlled by Baghouse Filter;
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filter;
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filter;
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filter;

Boiler House/Grounds:
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NOx Burner (Boiler#1);
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler, (Clayton Boiler); and

Fugitive PM and PM10 emissions

pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns

(PM_{10})). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2. The Clayton Boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60 Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).

3a. The Corn Receiving, Cleaning and Storage (NSPS) are subject to the NSPS for Grain Elevators, 40 CFR Part 60 Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 60. 300(a), the provisions of 40 CFR 60 Subpart DD apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

b. Pursuant to 40 CFR 60.300(b), any facility under 40 CFR 60.300(a) which commences construction, modification or reconstructed after August 3, 1978 is subject to the requirements of 40 CFR 60 Subpart DD.

c. Pursuant to 40 CFR 60.302(b), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

i. Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

ii. Exhibits greater than 0 percent opacity.

d. Pursuant to 40 CFR 60.302(c), on and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or

operator subject to the provisions of 40 CFR 60 Subpart DD shall cause to be discharged into the atmosphere any fugitive emission from:

i. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

ii. Any grain handling operation, which exhibits greater than 0 percent opacity.

iii. Any truck loading station which exhibits greater than 10 percent opacity.

4a. The Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; Corn Mill Products Milling and Handling; Boiler #1, and Clayton Boiler are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. When processing and handling processed materials, the emission units constructed on or after April 14, 1972 within the following groups: Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process

emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60

Metric P Mg/hr	E kg/hr	English P T/hr	E lbs/hr
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. When processing and handling processed materials, the emission units constructed before April 14, 1972 within the following groups: Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.322(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.322(c).

h. Pursuant to 35 Ill. Adm. Code 212.322(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.322(c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10

	Metric	English
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

i. Pursuant to 35 Ill. Adm. Code 212.322(c), Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P Mg/hr	E kg/hr	P T/hr	E lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

j. The handling of grain in the Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations are subject to 35 Ill. Adm. Code Part 212 Subpart S (Agriculture). Pursuant to 35 Ill. Adm. Code 212.462, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d), or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), existing grain-handling operations with a total annual grain through-put of 300,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall demonstrate compliance with the following:

i. Cleaning and Separating Operations.

A. Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.

B. For grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

ii. Major Dump-Pit Area.

Induced Draft.

A. Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:
V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in ft^2; and

B. The induced draft air stream for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90 percent by weight;

C. Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50 percent of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 ft; or

iii. Internal Transferring Area.

A. Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

B. Air contaminants collected from internal transfer operations for grain-handling sources having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90 percent by weight prior to release into the atmosphere.

iv. Load-Out Area.

A. Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

B. Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

k. Pursuant to 35 Ill. Adm. Code 212.463, unless otherwise exempted pursuant to 35 Ill. Adm. Code 212.461(c) or (d) or allowed to use alternate control according to 35 Ill. Adm. Code 212.461(g), grain-drying operations for which construction or modification commenced prior to June 30, 1975, with a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the following:

i. Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.

ii. Rack Dryers. No portion of the exhaust air of rack dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

A. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90 percent by weight prior to release into the atmosphere.

B. All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling sources having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 98 percent by weight prior to release into the atmosphere.

iii. Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack dryers pursuant to 35 Ill. Adm. Code 212.463(b).

iv. New and Modified Grain-Drying Operations. Grain-drying operations constructed or modified on or after June 30, 1975, shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code Part 201, and shall comply with the control equipment requirements of 35 Ill. Adm. Code 212.463, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5 percent moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineer Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

5. Boiler #1 and Clayton Boiler are subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

6a. This permit is issued based on the Cooling Tower at this source not being subject to the NESHAP for Process Cooling Towers, 40 CFR 63

Subpart Q because the cooling tower is not operated with chromium-based water treatment chemicals and is not either major sources or is an integral part of a facility that is a major source.

b. This permit is issued based on the source no longer being subject to the NESHAP for Solvent Extraction for Vegetable Oil Production, 40 CFR 63 Subpart GGGG, because the source no longer operates a vegetable oil production process and is no longer a major source of HAP emissions.

c. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2.

d. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to the requirements of the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

e. This permit is issued based on the source not being subject to the National Emission Standards (NESHAP) for Area Sources: Prepared Feeds Manufacturing, 40 CFR 63 Subpart DDDDDDD because the source does not use a material containing chromium or a material containing manganese in the manufacturing of prepared feeds.

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code Part 212 Subpart K is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. This permit is issued based on the handling of grain in the Corn Receiving, Cleaning and Storage (Pre-NSPS); Corn Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling Operations not being subject to 35 Ill. Adm. Code Part 212 Subpart L while handling grain. Pursuant to 35 Ill. Adm. Code 212.461(a), 35 Ill. Adm. Code 212.302(a), 212.321, and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling equipment and one-turn storage space.

8. This permit is issued based on Boiler #1 and Clayton Boiler at this source not being subject to 35 Ill. Adm. Code Part 215 Subpart K. Pursuant to 35 Ill. Adm. Code 215.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 shall not apply to fuel combustion emission sources.

9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

10a. Housekeeping Practices. Pursuant to 35 Ill. Adm. Code 212.461(b), all grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:

i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.

ii. Cleaning and Maintenance.

A. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.

B. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.

C. The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump Pit.

A. Aspiration equipment shall be maintained and operated.

B. Dust control devices shall be maintained and operated.

iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.

v. Property. The yard and driveway of any source shall be asphalted, oiled or equivalently treated to control dust.

vi. Housekeeping Check List. Housekeeping check lists shall be completed by the manager and maintained on the premises for inspection by Illinois EPA personnel.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The baghouse filters and cyclones shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse filters and cyclones such that the baghouse filters and cyclones are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. Each receiving dump pit shall be inspected for proper operation while receiving is occurring, at least once each week (Monday through Sunday) when grain is received.

e. The source shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed.

f. Boiler #1 and Clayton Boiler shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler #1 or Clayton Boiler may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.

g. All normal traffic pattern access areas and all normal traffic pattern roads and parking facilities which are located on Ag Transload Facility property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 11(j).

h. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

i. Grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

j. The emission units described in Conditions 11(g), (h), and (i) shall be operated under the provisions of an operating program, consistent with 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

k. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

   vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

l. Within 90 days from date of issuance of this permit a Fugitive Particulate Operating Program must be submitted by the Permittee and is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 11(j) and (k).

m. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 11(j) and (k) and shall be submitted

to the Illinois EPA within thirty (30) days of any such amendment. Any future amendment to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of the notification to address the deficiency.

12a. Emissions from and operation of the Corn Receiving, Cleaning and Storage (Pre-NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Truck Dump #1	0.002	0.0015	18,500	0.32	1.39	0.24	1.04
Hoffman Bldg 301 Vacuum	0.001	0.001	1,000	0.01	0.04	0.01	0.04
West Headhouse General Aspiration	0.0015	0.0015	55,000	0.71	3.10	0.71	3.10
Railcar Dump Pit and Section D&E General Aspiration	0.0015	0.0015	21,600	0.28	1.22	0.28	1.22
Track 6 Vacuum	0.001	0.001	700	0.01	0.03	0.01	0.03
Cleanings Discharge	0.002	0.0015	1,900	0.03	0.14	0.02	0.11
Grain Receiving Fugitives					3.01		3.01
				Total:	8.93		8.55

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

b. Emissions from and operation of the Corn Receiving, Cleaning and Storage (NSPS) shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	EMISSIONS PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Truck Dump #4 and Gallery Aspiration	0.002	0.002	36,017	0.62	2.70	0.62	2.70
Cleaning North APM	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
Bldg. 115 Corn Cleaning	0.002	0.0015	57,372	0.98	4.31	0.74	3.23
North Street Truck Dump Pit #2	0.002	0.0015	25,109	0.43	1.89	0.32	1.41
				Total:	11.98		9.65

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source, and 8,760 hours/year of operation.

c. Emissions from and operation of the Dry Corn Milling, Processing and Products Handling shall not exceed the following limits:

Emission Unit	PM Grain Loading (gr/dscf)	PM_{10} Grain Loading (gr/dscf)	Total Flow Rate (scfm)	E M I S S I O N S PM (lbs/Hr)	PM (Tons/Yr)	PM_{10} (lbs/Hr)	PM_{10} (Tons/Yr)
Bemos Bagging	0.002	0.0015	1,660	0.03	0.12	0.02	0.09
Bagging General Aspiration	0.002	0.0015	3,400	0.06	0.26	0.04	0.19
Bagging Packer General Aspiration	0.002	0.0015	4,400	0.08	0.33	0.06	0.25
Bran Dryer Process	0.002	0.0015	2,200	0.04	0.17	0.03	0.12
Bran Sifter Process	0.002	0.0015	6,215	0.11	0.47	0.08	0.35
East Meal Dryer/Cooler	0.002	0.0015	13,000	0.22	0.98	0.17	0.73
West Meal Dryer	0.002	0.0015	13,295	0.23	1.00	0.17	0.75
Bldg 105/115 General Aspiration	0.002	0.0015	55,000	0.94	4.13	0.71	3.10
Bldg 102/105 General Aspiration	0.002	0.0015	43,700	0.75	3.28	0.56	2.26
Bldg 105 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bulk Loading White Goods	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
Bldg 104 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
Bran Bin	0.002	0.0015	980	0.02	0.07	0.01	0.06
South Lunchroom Screening	0.002	0.0015	42,826	0.73	3.22	0.55	2.41
South CD Screening	0.002	0.0015	41,000	0.70	3.08	0.53	2.31
North CD General Aspiration	0.002	0.0015	33,300	0.57	2.5	0.43	1.88
North Lunchroom Screening	0.002	0.0015	40,000	0.69	3.00	0.51	2.25
Pack & Bulk Loading Bldg 115	0.002	0.0015	42,000	0.72	3.15	0.54	2.37
CAMAS/Bran Bldg 115	0.002	0.0015	45,021	0.77	3.38	0.58	2.54
Thru/Tail Stock Dryers Bldg 115	0.002	0.0015	56,000	0.96	4.2	0.72	3.15
Bldg 115 Vacuum	0.001	0.001	825	0.01	0.03	0.01	0.03
Track 2 Railcar Unloading Secondary Receiver	0.002	0.0015	440	0.01	0.03	0.01	0.02
Lab Filter	0.002	0.0015	900	0.02	0.07	0.01	0.05
1/2 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
1/2 Pulvocron Visc Flour Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
3/4 Pulvocron Meal Receiver	0.002	0.0015	380	0.01	0.03	0.01	0.02
9/10 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
7/8 Pulvocron Meal Secondary Receiver	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#3 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#4 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16

#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#1 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#2 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
#7 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#8 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#9 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
#10 Pulvocron	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
3/4 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
1/2 Pulvocron Meal Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
7/8 Pulvocron Meal Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
1/2 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
3/4 Flour Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
7/8 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
9/10 Flour Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Hibond Visc Flake Roller Mill	0.002	0.0015	7,200	0.12	0.54	0.09	0.41
CSM Blended Food Receiver	0.002	0.0015	4,077	0.07	0.31	0.05	0.23
Blended Food Packaging Aspiration	0.002	0.0015	10,000	0.17	0.75	0.13	0.56
Allbond Visc Four General Aspiration	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bins	0.002	0.0015	400	0.01	0.03	0.01	0.02
300 Series Binning	0.002	0.0015	4,452	0.08	0.33	0.06	0.25
Soy Meal General Aspiration	0.002	0.0015	1,435	0.02	0.11	0.02	0.08
Soy Meal Surge Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Meal Bin Cooler	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
3/4 Soy Flour Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Tri Cal Bins	0.002	0.0015	780	0.01	0.06	0.01	0.04
5/6 Allbond Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
7/8 Soy Flour Receiver	0.002	0.0015	1,100	0.02	0.08	0.01	0.06
Bin 308	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 309	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 310	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 508	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bin 509	0.002	0.0015	500	0.01	0.04	0.01	0.03
9/10 Pulvocron Receiver	0.002	0.0015	700	0.01	0.05	0.01	0.04
Milk Bins	0.002	0.0015	867	0.01	0.07	0.01	0.05
Milk Bin Bag Dump	0.002	0.0015	6,000	0.10	0.45	0.08	0.34
Blending Batch Bin General Aspiration	0.002	0.0015	1,250	0.02	0.09	0.02	0.07
Blending General Aspiration	0.002	0.0015	1,055	0.02	0.08	0.01	0.06
Blending General Aspiration	0.002	0.0015	1,645	0.03	0.12	0.02	0.09
CSB Binning General Aspiration	0.002	0.0015	3,200	0.05	0.24	0.04	0.18
CSB Binning General Aspiration	0.002	0.0015	2,739	0.05	0.21	0.04	0.15
Finished Product General Aspiration	0.002	0.0015	742	0.01	0.06	0.01	0.04

#5 SL General Aspiration & #5 Expander	0.002	0.0015	3,000	0.05	0.23	0.04	0.17
Fiber Receiving General Aspiration	0.002	0.0015	648	0.01	0.05	0.01	0.04
PCM Binning	0.002	0.0015	2,241	0.04	0.17	0.03	0.13
CF Bran Packing Binning	0.002	0.0015	1,232	0.02	0.09	0.02	0.07
Bldg 111 Vacuum	0.001	0.001	1,500	0.01	0.06	0.01	0.06
110/210 Receiver General Aspiration	0.002	0.0015	1,400	0.02	0.11	0.02	0.08
Fiber Receiving General Aspiration	0.002	0.0015	1,000	0.02	0.08	0.01	0.06
Cooling Tower	0.002	0.0015	14,000	0.24	1.05	0.18	0.79
Ingredient Bin 601	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 602	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 603	0.002	0.0015	210	0.004	0.02	0.003	0.01
Ingredient Bin 604	0.002	0.0015	210	0.004	0.02	0.003	0.01
Micro Ingredient Dump Aspiration	0.002	0.0015	2,500	0.04	0.19	0.03	0.14
Mixer General Aspiration	0.002	0.0015	1,500	0.03	0.11	0.02	0.08
3/4 Hammermill	0.002	0.0015	1,258	0.02	0.09	0.02	0.07
#3 & #4 Expanders	0.002	0.0015	1,017	0.02	0.08	0.01	0.06
Reprocessing General Aspiration	0.002	0.0015	27,550	0.47	2.07	0.35	1.55
#5 Pulvocron	0.002	0.0015	2,904	0.05	0.22	0.04	0.16
5/6 Pulverizer AB Finished Product Surge Bin	0.002	0.0015	570	0.01	0.04	0.01	0.03
Pellet Bins	0.002	0.0015	705	0.01	0.05	0.01	0.04
Viscosity Flour Receiver	0.002	0.0015	2,143	0.04	0.16	0.03	0.12
Conditioning Receiver/Soy Meal Grinding	0.002	0.0015	1,350	0.02	0.1	0.02	0.08
Grind Reject/Scrap Bin	0.002	0.0015	500	0.01	0.04	0.01	0.03
Bldg 112 Vacuum	0.001	0.001	500	0	0.02	0	0.02
AB Grinder Surge Bin	0.002	0.0015	2,100	0.04	0.16	0.03	0.12
N CD General Aspiration & #5 Expander	0.002	0.0015	36,000	0.62	2.70	0.46	2.03
South Hominy Feed Bin General Aspiration	0.002	0.0015	15,000	0.26	1.13	0.19	0.84
Secondary Clean Grinding	0.002	0.0015	2,000	0.03	0.15	0.03	0.11
Bran Dryer	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Track 16 Rail Loadout	0.002	0.0015	30,000	0.51	2.25	0.39	1.69
Germ Dust Aspiration	0.02	0.02	7,400	1.27	5.56	1.27	5.56
Feed Mill General Aspiration	0.002	0.0015	16,000	0.27	1.2	0.21	0.9
Germ Dryer	0.0454	0.002	10,000	3.89	17.04	0.17	0.75
FTS Dryer Aspiration	0.0454	0.002	6,888	2.68	11.74	0.12	0.52
Pet Bran Kice Lites Aspiration	0.002	0.0015	1,600	0.03	0.12	0.02	0.09
Pneumatic Lift Receiver for WG260 Transfer	0.02	0.02	682	0.12	0.51	0.12	0.02
PCM Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.51
USG Hammermill	0.0020	0.0020	6,500	0.11	0.49	0.11	0.49

USG Secondary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	0.49
Whole Grain Dryer	0.0300	0.0200	1,400	0.36	1.58	0.24	1.05
Whole Grain Hammermill	0.0020	0.0015	6,000	0.1	0.45	0.08	0.34
Whole Grain Aspiration	0.0020	0.0015	5,080	0.09	0.38	0.07	0.29
USG Primary Extruder Transfer	0.0200	0.0200	4,000	0.69	3.00	0.69	3.00
6th Floor Radar Pulsar	0.0020	0.0015	7,400	0.13	0.56	0.1	0.42
CCM260 Process Aspiration(S 105 Carter-Day)	0.0020	0.0020	40,600	0.7	3.05	0.7	3.05
				Total:	116.69		62.80

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

d. Emissions from and operation of the Corn Mill Products Storage shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	EMISSIONS			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Bldg 201/202 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Bldg 208 Vacuum	0.0010	0.0010	700	0.01	0.03	0.01	0.03
Hominy Feed Bins Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
				Total:	1.64		1.24

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

e. Emissions from and operation of the Corn Mill Products Milling and Handling shall not exceed the following limits:

	PM Grain Loading	PM_{10} Grain Loading	Total Flow Rate	EMISSIONS			
				PM		PM_{10}	
Emission Unit	(gr/dscf)	(gr/dscf)	(scfm)	(lbs/Hr)	(Tons/Yr)	(lbs/Hr)	(Tons/Yr)
Hominy Binning	0.0020	0.0015	30,000	0.51	2.25	0.39	1.69
Hominy Grind General Aspiration	0.0020	0.0015	21,000	0.36	1.58	0.27	1.18
Hominy Truck Loadout	0.0020	0.0015	34,960	0.6	2.62	0.45	1.97
Track 15 Bulk Rail Loadout	0.0020	0.0020	34,960	0.6	2.62	0.6	2.62
Hominy Screener General Aspiration	0.0020	0.0015	7,600	0.13	0.57	0.1	0.43
Hominy Loadout Fugitive					6.90		1.02
Grain Loadout Fugitive					0.10	0.27	0.10
				Total:	16.64		9.01

These limits are based on the maximum exhaust air flow rate, maximum grain loading determined by stack testing at the source or manufacturers' guaranty, and 8,760 hours/year of operation.

f. Compliance with the annual limits in Conditions 12(a) through 12(e) of this permit shall be determined on a daily basis from the sum of the data for the current day plus the preceding 364 days (running 365 days total).

g. Emissions from and operation of Boiler #1 shall not exceed the following limits:

i. Natural Gas Usage: 84.58 mmscf/month, 845.78 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	3.55	35.52
Nitrogen Oxides (NO_x)	50.0	2.11	21.14
Particulate Matter (PM)	7.6	0.32	3.21
Sulfur Dioxide (SO_2)	0.6	0.02	0.25
Volatile Organic Material (VOM)	5.5	0.23	2.33

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

h. Emissions from and operation of Clayton Boiler shall not exceed the following limits:

i. Natural Gas Usage: 24.44 mmscf/month, 244.40 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emissions (lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	1.03	10.26
Nitrogen Oxides (NO_x)	100.0	1.22	12.22
Particulate Matter (PM)	7.6	0.09	0.93
Sulfur Dioxide (SO_2)	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.07	0.67

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

i. Compliance with the annual limits in Condition 12(g) and (h) of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

14a. Pursuant to 40 CFR 60.8(a), except as specified in 40 CFR 60.8(a)(1), (a)(2), (a)(3), and (a)(4), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).

b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:

i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

ii. Approves the use of an equivalent method;

iii. Approves the use of an alternative method the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific source is in compliance;

iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or

v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.

c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior

notice of any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such facility. This includes:

A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.

g. Pursuant to 40 CFR 60.11(e)(2), except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in 40 CFR Part 60 applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Illinois EPA or USEPA the opacity results along with the results of the initial performance test

required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

15a. Pursuant to 40 CFR 60.303(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.303, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.303(c).

b. Pursuant to 40 CFR 60.303(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.302 as follows:

i. Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

ii. Method 2 shall be used to determine the ventilation volumetric flow rate.

iii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. Pursuant to 40 CFR 60.303(c)(1), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.303: For Method 5, Method 17 may be used.

16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 17 and 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

17a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code Part 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

18a. Within ninety (90) days after the issuance of this permit, the Permittee shall:

i. Conduct observations to determine visual emissions using USEPA Method 22 from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123. Thereafter, this testing shall be conducted on a quarterly basis no later than 30 days after the end of the preceding calendar quarter.

ii. Measure and quantify the emissions of PM (gr/dscf and lb/hr) and PM_{10} (gr/dscf and lb/hr) emissions from the Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS); Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS); Dry Corn Milling, Processing and Products Handling; Corn Mill Products Storage; and Corn Mill Products Milling and Handling during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321 and Condition 13(b) of this permit. Thereafter, this testing shall be conducted at least once every (5) five years from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters	USEPA Method 5D
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, flow rate, etc.), if any.

19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence

and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

The Illinois EPA or USEPA, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR 60.7(f), if the Illinois EPA or USEPA determines these records are required to more accurately assess the compliance status of the affected source.

20a. i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.

ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the baghouse filters and cyclones:

A. Records for periodic inspection of the baghouse filters and cyclones with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a

record of activities completed according to the Fugitive Particulate Operating Program.

iii. Records of housekeeping check lists;

iv. Records for the inspections required by Conditions 11(d) and (e), with date, time and observations if such information is not incorporated in the housekeeping check list.

v. Total flow rate for each baghouse blower (scfm);

vi. Total grain loading for each process (gr/dscf);

vii. Total hours of operation of each baghouse (hours/day and hours/year);

viii. Daily and annual emissions of PM, and PM_{10} from the source with supporting calculations (tons/month and tons/year).

ix. Natural gas usage for Boiler #1 (mmscf/month and mmscf/year);

x. Natural gas usage for the Clayton Boiler (mmscf/month and mmscf/year); and

xi. Monthly and annual emissions of CO, NO_x, PM, PM_{10}, SO_2, and VOM from the combustion of natural gas, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 23(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

24. Pursuant to 40 CFR 60.7(a)(4), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corn Mill & Grain Elevator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, and PM_{10}) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM	PM_{10}	SO_2	VOM
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS)			8.93	8.55		
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS)			11.98	9.65		
Dry Corn Milling, Processing and Products Handling			116.69	62.80		
Corn Mill Products Storage			1.64	1.24		
Corn Mill Products Milling and Handling			16.64	9.01		
Boiler #1, Natural Gas	35.52	21.14	3.21	3.21	0.25	2.33
Clayton Boiler NG	10.26	12.22	0.93	0.93	0.07	0.67
Totals	45.78	33.36	160.02	95.39	0.32	3.00

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25. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

i. Via mail or overnight delivery:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. and electronically:

epa.boa.smu@illinois.gov

It should be noted that the two (2) 193 Diesel Fire-Pump Engines are exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(i) and the 150,000 gallon fuel oil storage tank is exempt from permitting, pursuant to 35 Ill. Adm. Code 201.146(n)(3)

If you have any questions on this permit, please call German Barria at 217/785-1705.

Sincerely,

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the Unites States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.

3. a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:

   a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;

   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;

   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;

   d. To obtain and remove samples of any discharge or emission of pollutants; and

   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;

c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and

d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:

a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;

b. Maintain the following records for a period of no less than two (2) years:

i. Date and duration of malfunction, breakdown, or startup,

ii. Full and detailed explanation of the cause,

iii. Contaminants emitted and an estimate of quantity of emissions,

iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and

v. Measures taken to reduce future occurrences and frequency of incidents.

10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.

11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

First Name	Last Name
American Lung Association of IL-IA	John DeRosa
HeplerBroom LLC	LaDonna Driver
Bunge Milling, Inc.	Attn: Paul Catterson
Congresswoman	Mary Miller
Illinois State Representative	Michael T. Marron
County Clerk	Cathy Jenkins
Village Clerk	Lori Fields

Emails

Duckworth contact	Springfield Office
Illinois State Senator	Scott M. Bennett 52
	Precious Onuohah
Mayor	Rickey Williams, Jr.
City Clerk	Lisa Monson
County Board Chair	Larry Baughn
County State's Attorney	Jacqueline Lacy
Mayor within 3 mi.	David Phillips, Sr.

Source:	321 E. North St, Danville IL
	Located in an EJ area; 3% speak

Address	City	State	ZIP
3000 Kelly Lane	Springfield	IL	62711
4340 Acer Grove Dr.	Springfield	IL	62711
321 East North Street	Danville	IL	61832
201 North Vermillion Street, Suite 218	Danville	IL	61832
7 E. Fairchild Street	Danville	IL	61832
201 N. Vermilion St., First Floor	Danville	IL	61832
1001 Tilton Rd	Tilton	IL	61833

Municipalities within three miles of the source: Tilton

Randy_Sikowski@duckworth.senate.gov
michelle@senatorbennett.com
precious.onuohah@sierraclub.org
mayor@cityofdanville.org
cityclerk@cityofdanville.org
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statesattorney@vercounty.org
dphillips@tiltonil.com

English "less than very well"

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
1021 N. Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

Project Summary
Proposed Federally Enforceable State Operating Permit (FESOP)
Bunge North America, Inc.
Danville, Vermilion County, Illinois

Site Identification No.: 183020ABT
Application No.: 96020027

Schedule
Public Comment Period Begins:
Public Comment Period Closes:

Illinois EPA Contacts
Permit Analyst: German Barria
Community Relations Coordinator: Brad Frost
217/782-7027
Brad.Frost@illinois.gov

I. INTRODUCTION

Bunge North America, Inc. has applied for a Federally Enforceable State Operating Permit (FESOP) for its plant located at 321 E. North Street in Danville. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the renewed permit that it would propose to issue for the plant. However, before renewing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

II. SOURCE DESCRIPTION

Bunge North America, Inc. is a corn mill and grain elevator. The emission units at this plant that require an operating permit are shown in Table 1, below.

Table 1. Listing of Non-Exempt Emission Units Located at the Source.

Emission Unit and Description	Construction Date (and Date Last Modified)
Corn, Soybean & Products Receiving, Cleaning and Storage (Pre-NSPS):	
Truck Dump #1 (5012-0001-0016) controlled by Baghouse Filters APM 40072.10	Prior to 1978
Hoffman Bldg 301 Vacuum (5012-0010-0054) controlled by Baghouse Filters HOFFMAN 48X96	Prior to 1970
West Headhouse Transfer General Aspiration (5012-0005-0029) controlled by Baghouse Filters DD 484RF12	Prior to 1978
Railcar Dump Pit (5012-0004-0016) controlled by Baghouse Filters APM 41120.12	Prior to 1978
Track 6 Vacuum (5012-0010-0047) controlled by Baghouse Filters HOFFMAN 48X96	Prior to 1970
Cleanings Discharge (4870-0013-0015) controlled by Baghouse Filters BUHLER 16S-6-30	Prior to 1978
Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS):	
Truck Dump #4 & W. Gallery Aspiration (5012-0005-0021) controlled by Baghouse Filters DD 484RF12	1985
Cleaning North APM (4870-0013-0001) controlled by Baghouse Filters APM 41216.12	1996
Corn Cleaning Bldg 115 #2 (4880-0034-0069) controlled by Baghouse Filters TD 484RF12	1996
North St Grain/Meal Truck Dump Pit #2 (5012-0002-0012) controlled by Baghouse Filters DD 48RF12	Prior to 1978

Emission Unit and Description	Construction Date (and Date Last Modified)
Dry Corn Milling, Processing and Products Handling:	
Bemos Bagging (4870-0010-0055) controlled by Baghouse Filters APM 16019.8	1996
Bagging General Aspiration (4870-0010-0030) controlled by Baghouse Filters APM 40020.8	1996
Bagging Packer General Aspiration (4870-0013-0019) controlled by Baghouse Filters APM 14042.8	1996
Bran Dryer Process (4880-0042-0057) controlled by Baghouse Filters APM 14036.8	1996
Bran Sifter Process (4880-0042-0062) controlled by Baghouse Filters APM 10144.8	1996
East Meal Dryer/Cooler (4880-0034-0054) controlled by Baghouse Filters APM 40120.10	1996
West Meal Dryer (4880-0034-0059) controlled by Baghouse Filters APM 40144.8	1996
Bldg 105/115 General Aspiration (4880-0034-0027) controlled by Baghouse Filters DD 484RF12	1996
Bldg 102/105 General Aspiration (4880-0034-0001) controlled by Baghouse Filters MCF 144-756	1996
Bldg 105 Vacuum (4880-0032-0052) controlled by Baghouse Filters HOFFMAN 36X96	1996
Bulk Loading White Goods (4870-0021-0001) controlled by Baghouse Filters DD 484RF12	1996
Bldg 104 Vacuum (4870-0015-0016) controlled by Baghouse Filters HOFFMAN 38405A	1996
Bran Bin (4880-0042-0054) controlled by Baghouse Filters BUHLER 16S-6-30	1996
South Lunchroom Screening (4880-0034-0010) controlled by Baghouse Filters CD 484RF12	1996
South CD Screening (4880-0034-0042) controlled by Baghouse Filters CD 484RF12	1996
North CD General Aspiration (4880-0034-0048) controlled by Baghouse Filters CD 484RF12	1996
North Lunchroom Screening (4880-0034-0019) controlled by Baghouse Filters CD 484RF12	1996
Pack & Bulk Loading Bldg 115 (4870-0013-0024) controlled by Baghouse Filters TD 484RF12	1996
CAMAS/Bran Bldg 115 (4880-0034-0077) controlled by Baghouse Filters TD 484RF12	1996
Thru/Tail Stock Dryers Bldg 115 (4880-0034-0071) controlled by Baghouse Filters TD 484RF12	1996
Bldg 115 Vacuum (4880-0032-0070) controlled by Baghouse Filters HOFFMAN S54002	1996
Track 2 Railcar Unloading Secondary Receiver (4870-0005-0003) controlled by Baghouse Filters USS INC. 15CF P/D	1996
Lab Filter (4932-0001-0001) controlled by Baghouse Filters APM 14106.4	Prior to 1970
1/2 Pulvocron Meal Receiver (4990-0005-0012) controlled by Baghouse Filters BUHLER 9-6-100	1996
1/2 Pulvocron Visc Flour Receiver (4990-0005-0042) controlled by Baghouse Filters BUHLER 16-8-100	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
3/4 Pulvocron Meal Receiver (4990-0002-0010) controlled by Baghouse Filters BUHLER 9-6-100	1996
9/10 Pulvocron Meal Secondary Receiver (4990-0004-0013) controlled by Baghouse Filters BUHLER 16009.4	1996
7/8 Pulvocron Meal Secondary Receiver (4990-0003-0010) controlled by Baghouse Filters BUHLER 16009.4	1996
Three (3) Mills (#3 Pulvocron (4990-0002-0019), #4 Pulvocron (4990-0002-0022), and #5 Pulvocron (4900-0001-0039)) controlled by Baghouse Filters BUHLER 37-8-220	1996
Two (2) Mills (#1 Pulvocron (4990-0005-0021) and #2 Pulvocron (4990-0005-0024)) controlled by Baghouse Filters BUHLER 37-8-220	1996
Four (4) Mills (#7 Pulvocron (4990-0003-0019), #8 Pulvocron (4990-0003-0022), #9 Pulvocron (4990-0004-0022) and #10 Pulvocron (4990-0004-0025)) controlled by Baghouse Filters APM 16022.8	1996
3/4 Pulvocron Grinder Surge Bin (4990-0002-0008) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
1/2 Pulvocron Grinder Surge Bin (4990-0005-0010) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
9/10 Pulvocron Grinder Surge Bin (4990-0004-0011) controlled by Baghouse Filters APM 16104.4	1996
7/8 Pulvocron Grinder Surge Bin (4990-0003-0008) controlled by Baghouse Filters APM 16104.4	1996
1/2 Flour Surge Bin (4990-0005-0028) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
3/4 Flour Surge Bin (4990-0002-0026) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
7/8 Flour Surge Bin (4990-0003-0026) controlled by Baghouse Filters APM 16104.4	1996
9/10 Flour Surge Bin (4990-0004-0029) controlled by Baghouse Filters APM 16104.4	1996
HIBOND Visc. Flake Roller Mill (4990-0006-0024) controlled by Baghouse Filters APM 15066.8	1996
CSM Blended Food Receiver (4820-0001-0029) controlled by Baghouse Filters APM 40070.7	1996
Blended Food Packaging (4820-0001-0052) controlled by Baghouse Filters APM 16150.6	1996
ALLBOND Visc. Flour General Aspiration (4900-0001-0068) controlled by Baghouse Filters BUHLER 16-8-100	1996
Milk Bins (4820-0003-0007) controlled by Baghouse Filters MICROPUL 6B	1996
300 Series Binning (4990-0007-0049) controlled by Baghouse Filters MICROPUL 1F1	1996
Soy Meal General Aspiration (4990-0001-0002) controlled by Baghouse Filters APM 16022.4	1996
Soy Meal Surge Bin (4990-0001-0006) controlled by Baghouse Filters MICROPUL 6B	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
Meal Bin Cooler (4990-0001-0025) controlled by Baghouse Filters APM 400072.10	1996
3/4 Soy Flour Receiver (4990-0002-0043) controlled by Baghouse Filters APM16014.8	1996
Tri Cal Bins (4820-0003-0072) controlled by Baghouse Filters APM 16009.8	1996
5/6 Allond Receiver (4900-0001-0058) controlled by Baghouse Filters APM 16014.8	1996
7/8 Soy Flour Receiver (4990-0003-0032) controlled by Baghouse Filters APM 16014.8	1996
Five (5) Bins (Bin 308 (4990-0002-0033), 309 (4990-0002-0036), 310 (4820-0003-0038), 508 (4820-0002-0068), and 509 (4820-0002-0072)) controlled by Baghouse Filters MICROPUL 6B	1996
9/10 Pulvicron Receiver (4990-0004-0037) controlled by Baghouse Filters BUHLER 16-6-220	1996
Milk Bins (4820-0002-0038) controlled by Baghouse Filters MICROPUL 21-6-220	1996
Milk Bin Bag Dump (4820-0002-0035) controlled by Baghouse Filters APM 14048.6	1996
Blending Batch Bin General Aspiration (4990-0007-0029) controlled by Baghouse Filters BUHLER 25S-6-30	1996
Blender General Aspiration (4990-0007-0036) controlled by Baghouse Filters BUHLER 16S-6-30	1996
Blender General Aspiration (4990-0007-0032) controlled by Baghouse Filters MICROPUL 36S-8-30	1996
Two (2) CSB Binning General Aspiration (4820-0003-0063 and 4820-0003-0059) controlled by Baghouse Filters BUHLER 64S-6-20	1996
#5 SL General Aspiration & #5 Expander (4900-0001-0091) controlled by Baghouse Filters APM 14024.6	1996
Fiber Receiver General Aspiration (4990-0011-0001) controlled by Baghouse Filters BUHLER 9-8-220	1996
PCM Binning (4820-0002-0011) controlled by Baghouse Filters MICROPUL 1F1	1996
CF Bran Packing Binning (4870-0010-0005) controlled by Baghouse Filters MICROPUL 25-8-220	1996
Bldg 111 Vacuum (4900-0005-0035) controlled by Baghouse Filters HOFFMAN 60X120	1996
110/210 Receiver General Aspiration (4870-0006-0006) controlled by Baghouse Filters APM 16030.4	1996
Fiber Receiver General Aspiration (4990-0011-0029) controlled by Baghouse Filters APM 16019.4	1996
Cooling Tower (4990-0001-0029) controlled by Baghouse Filters APM 40072.10	1996
Two (2) Ingredient Bins (601 (4820-0003-0022) and 602 (4820-0003-0026)) controlled by Baghouse Filters MICROPUL 4B	1996

Emission Unit and Description	Construction Date (and Date Last Modified)
Ingredient Bin 603 (4820-0003-0030) controlled by Baghouse Filters MICROPUL 2 1/2 B	1996
Ingredient Bin 604 (4820-0003-0034) controlled by Baghouse Filters APM 15105.4	1996
Micro Ingredient Dump Filter (4820-0003-0018) controlled by Baghouse Filters APM 15105.4	1996
Mixer General Aspiration (4820-0003-0004) controlled by Baghouse Filters BUHLER 25S-6-30	1996
3/4 Hammermill (4900-0001-0065) controlled by Baghouse Filters APM 16009.6	1996
#3 & #4 Expanders (4900-0001-0006) controlled by Baghouse Filters APM 16009.6	1996
Reprocess General Cooler Dryer Roof (4900-0005-0001) controlled by Baghouse Filters CD 376RF10	1996
#6 Pulverizer Grinder (4900-0001-0042) controlled by Baghouse Filters BUHLER 37-8-220	1996
5/6 Pulverizer AB Finished Product Surge Bin (4900-0001-0046) controlled by Baghouse Filters MICROPUL 4B	1996
Pellet Bins (4900-0002-0032) controlled by Baghouse Filters BUHLER 16S-6-30	1996
Viscosity Flour Receiver (4990-0006-0027) controlled by Baghouse Filters APM 16022.8	1996
Conditioning Receiver/Soy Meal Grinder (4990-0011-0010) controlled by Baghouse Filters APM 16014.8	1996
Grind Reject/Scrap Bin (4900-0005-0007) controlled by Baghouse Filters MICROPUL 2 1/2B	1996
Bldg 112 Vacuum (4900-0005-0029) controlled by Baghouse Filters HOFFMAN 36X96	1996
AB Grinder Surge Bin (4900-0001-0030) controlled by Baghouse Filters BUHLER 37-8-220	1996
N CD General Aspiration & #5 Expander (4900-0005-0006) controlled by Baghouse Filters CD 484RF12	1996
South Hominy Feed Bin General Aspiration (4860-0018-0003) controlled by Baghouse Filters MICROPUL 1F2	Prior to 1970
Secondary Clean Grinding (4860-0022-0017) controlled by Baghouse Filters APM 15030.8	Prior to 1970
Bran Dryer (4860-0024-0003) controlled by Corona Cyclone	Prior to 1970
Track 16 Bulk Rail Loadout (4912-0006-0017) controlled by Baghouse Filters WEIDENMAN LFT 2X7	1982
Germ Dust Aspiration (4860-0017-0073) controlled by Baghouse Filters APM 40120.8	Prior to 1970
Feed Mill General Aspiration (4860-0023-0001) controlled by Baghouse Filters APM 40120.8	Prior to 1970
Germ Dryer (4860-0017-0003) controlled by DAY CYCLONE HV56	Prior to 1970
FTS Dryer Aspiration (4860-0019-0003) controlled by CORONA 15 CYCLONE	Prior to 1970

Emission Unit and Description	Construction Date (and Date Last Modified)
Pet Bran Kice Lites Filter (4860-0024-0037) controlled by Baghouse Filters MICROPUL	1995
Bin 945 Germ Receiver (4860-0017-0026) controlled by Baghouse Filters BUHLER 36S-6-30	Prior to 1970
Two (2) Cyclone Receivers (Extrusion Receiver; 108 A-Bin Receiver) controlled by Baghouse Filters (5&6 Allbond Receiving Filter)	2015
Pneumatic Lift Receiver for Coarse Whole Grain transfer (WG260)	2016
PCM Hammermill controlled by Filter System (78-03:11)	2018
USG Hammermill controlled by Filter System (78-03:27)	2018
USG Extruder Pellet Transfer controlled by Collection Cyclone (78-08:22)	2018
One (1) #1 Coarse Gravity Table Aspiration Cyclone Collector (05:68) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) #3 Fine Gravity Table Aspiration Cyclone Collector (06:88) (17,000 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) #1 Satake Degerminator Cyclone Collector (45:07) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) #1 Satake Aspiration Cyclone Collector (45:12) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) #2 Satake Degerminator Cyclone Collector (45:09) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) #2 Satake Aspiration Cyclone Collector (45:24) (1,400 dscfm) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
Satake Sifter and Sifter Air Locks controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) Pneumatic Transfer Line and Cyclone Receiver (45:20) controlled by 8th Floor Donaldson Filter (34:27) controlled by the S 105 Roof Carter-Day Filter (334:86)	2022
One (1) Pneumatic Transfer Line and Cyclone Receiver (23:102) controlled by West MAC Filter (34:01) controlled by the S 105 Roof Carter-Day Filter (334:86)	
Corn Mill Products Storage:	
Bldg 201/202 Vacuum (4912-0008-0006) controlled by Baghouse Filters HOFFMAN 36X96	Prior to 1970
Bldg 208 Vacuum (4912-0009-0005) controlled by Baghouse Filters HOFFMAN 36X96	Prior to 1970
Hominy Feed Bins Aspiration (4750-0029-0074) controlled by Baghouse Filters DONALDSON 276RFW12	Prior to 1970
Corn Mill Products Milling and Handling:	

Emission Unit and Description	Construction Date (and Date Last Modified)
Hominy Binning (4750-0029-0032) controlled by Baghouse Filters APM 40240.8	Prior to 1970
Hominy Grinder General Aspiration (4750-0029-0001) controlled by Baghouse Filters APM 40224.4	Prior to 1970
Truck Hominy Loadout (4912-0004-0022) controlled by Baghouse Filters 376RF8	1980
Rail Hominy/Grain Loadout #1 (4912-0003-0011) controlled by Baghouse Filters 376RF12	1981
Long Term Meal System (LTMS) & Rail Meal/Grain Transfer (4750-0033-0001) controlled by Baghouse Filters 376RF8	1985
LTMS & Rail Meal/Grain Loadout (4750-0033-0011) controlled by Baghouse Filters MAC 144MCF416	1985
Hominy Screener General Aspiration (4750-0029-0045) controlled by Baghouse Filters MICROPUL 100S-6-20	Prior to 1970
Boiler House/Grounds:	
One (1) 96.55 mmBtu/hour Natural Gas-Fired Boiler with Low NO_x Burner (Boiler #1)	1986
One (1) 27.90 mmBtu/hour Natural Gas-Fired Boiler (Clayton Boiler)	2010

These units are sources of emissions because Particulate Matter (PM) and Particulate Matter less than 10 microns (PM_{10}) is generated from the receiving, handling, and milling of grain at the facility. This source is also a source of Carbon Monoxide (CO) and Nitrogen Oxides (NO_x) from the combustion of fuel in the boilers and generator at this facility. NO_x is formed thermally by the combination of oxygen and nitrogen in the air at the temperatures at which fuel is burned. Thermal NO_x is formed during all common high temperature combustion processes. CO is formed from incomplete combustion of the fuel.

The following table lists annual emissions (tons) of pollutants emitted from this source, as reported in the last three Annual Emission Reports (AER) sent to the Illinois EPA:

Table 2. Actual and Potential (as limited by permit) Emissions of the Source.

Pollutant	Actual Emissions			PTE
	2019 (tons)	**2020** (tons)	**2021** (tons)	**as limited by permit** (tons/year)
Carbon Monoxide (CO)	16.3400	17.3000	16.5400	45.78
Nitrogen Oxides (NO_x)	11.6000	11.9000	10.7000	33.36
Particulate Matter (PM)	65.8000	65.5000	59.7000	160.02
Particulate Matter less than 10 Microns (PM_{10})	28.0000	32.9000	31.3000	95.39
Sulfur Dioxide (SO_2)	0.1100	0.1300	0.1200	0.32
Volatile Organic Material (VOM)	1.1700	1.5800	1.4000	3.00

This source also contains emission units and activities that are exempt from permitting under 35 Ill. Adm. Code 201.146 and the emissions from such units are not limited by the conditions of the draft permit. These emission units include:

Two (2) 193 Diesel Fire-Pump Engines
150,000 gallon fuel oil storage tank

Based on a review of the estimated potential emissions from the exempt emission units as included in the permit application, the Illinois EPA has determined that the emissions from such exempt emission units are trivial and will not contribute to this source being a major source of emissions for any regulated pollutants emitted from any such exempt emission unit. This is because the emission limits for CO, NO_x, and PM_{10} in the draft FESOP are 90% or less of the applicable major source thresholds, and the combined PTE of the exempt emission units are less than 5% of the applicable major source thresholds, In other words, the emission limits for CO, NO_x, and PM_{10} have been limited to 90% or less of the applicable threshold (or 100 tons/year) by the draft FESOP and the combined potential to emit of the CO, NO_x, and PM_{10} from the exempt units is estimated to be less than 5% of 100 tons/year. In addition, as shown in Table 2, above, the margin of compliance between the actual emissions reported by the source during the last three years and the potential emissions as limited in the draft FESOP is more than 63% for CO, 65% for NO_x, and 67% for PM_{10}, which further minimizes the likelihood of the source exceeding its permit limits or the applicable major source thresholds.

In cases where the potential emissions of exempt emission units may contribute to the source exceeding major source thresholds (for example, if the emission limits in the FESOP are 90% or more of the applicable major source thresholds and the exempt units' PTE is 5% or more of the threshold) the Illinois EPA has established limits on such emission units in the draft FESOP that would normally be exempt from permitting. The permitting exemptions in 35 Ill. Adm. Code 201.146 do not relieve the owner or operator of any source from any obligation to comply with any other applicable requirements.

III. GENERAL DISCUSSION

FESOPs are federally enforceable, that is, the terms and conditions of the permits can be enforced by the United States Environmental Protection Agency (USEPA) under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source may operate this plant under a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need to obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for CO, NO_x, and PM_{10}. The potential emissions of other pollutants (e.g., SO_2, VOM, and Hazardous Air Pollutants) from the plant are small enough that no restrictions are needed to avoid being a major source of these pollutants.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board (Board). These emission standards represent the basic requirements for sources in Illinois. The Board has specific standards for particulate matter under 35 Ill. Adm. Code Part 212. The processing and milling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions), which limits the opacity of emissions to 30 percent, and 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units), which limits PM emissions based on each units process weight rate. The receipt and handling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions) and 35 Ill. Adm. Code Part 212 Subpart S (Agriculture), which requires the source to implement and use certain housekeeping practices to reduce particulate matter emissions and to equip the sources receiving dump pits with air pollution control equipment that is capable of at least 90% collection efficiency for PM emissions. The boilers are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions).

The Clayton Boiler is at this source are subject to the New Source Performance Standards (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. The source also has another boiler that was constructed prior to June 9, 1989 and as result will not be subject the NSPS standards.

Corn, Soybean & Products Receiving, Cleaning and Storage (NSPS) at this source are subject to the New Source Performance Standards (NSPS) for Grain Elevators, 40 CFR 60, Subparts A and DD. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. The source also has other grain receiving, cleaning and storage operations that were constructed prior to August 3, 1978 and as result will not be subject the NSPS standards.

The application shows that the plant is in compliance with applicable state and federal emission standards.

V. CONTENTS OF THE PERMIT

The permit that the Illinois EPA is proposing to issue will identify the specific emission standards that apply to the emission units at the plant. As explained, the processing and milling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B, which limits the opacity of emissions to 30 percent, and 35 Ill. Adm. Code Part 212 Subpart L, which limits PM emissions based on each units process weight rate. The receipt and handling of grain is subject to 35 Ill. Adm. Code Part 212 Subpart B and 35 Ill. Adm. Code Part 212 Subpart S, which requires the source to implement and use certain housekeeping practices to reduce particulate matter emissions and to equip the sources receiving dump pits with air pollution control equipment that is capable of at least 90% collection efficiency for PM emissions. The boilers are subject to 35 Ill. Adm. Code Part 212 Subpart B, which limits the opacity of emissions to 30 percent. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for CO, NO_x, and PM_{10}. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit would also set limitations on PM_{10} emissions based on the air flow to the baghouses and cyclones and the grain loading of these control devices determine by stack testing conducted at the source. The boilers are to be limited based on the types of fuel combusted and the amount of each fuel usage. These limitations are consistent with the historical operation of emission units at the plant.

The permit conditions would also continue to require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for issuance of its permit. The Illinois EPA is therefore proposing to issue the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.