

Exhibit D



HODGE DWYER & DRIVER

KATHERINE D. HODGE
E-mail: khodge@hddattorneys.com

March 11, 2013

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Environmental Protection Agency
BUREAU OF AIR

VIA HAND DELIVERY

Edwin C. Bakowski, P.E.
Manager, Permit Section
Illinois Environmental Protection Agency
Division of Air Pollution Control - MC #11
1021 North Grand Avenue East
PO Box 19276
Springfield, IL 67294-9276

Re: Supplement to Pending Construction Permit Application
KCBX Terminals Company
10730 South Burley Avenue, Chicago, Illinois 60617
Permit No. 07050082
Facility I.D. 031600GSF

Dear Mr. Bakowski:

On behalf of KCBX Terminals Company ("KCBX"), we would like to thank you, Mr. Layman, Mr. Bernoteit, and Mr. Dragovich for taking the time to meet with us to discuss the resolution of certain items related to the above-referenced permit. As a result of the meeting, we were able to reach an agreement on a path forward to address these items. To that end, and in response to your request, please find enclosed a redlined version of the permit incorporating the revisions as discussed, including the language at Condition 1(b) that clarifies the operating authority for existing emissions units listed in prior versions of the permit. This is essentially the language proposed by Mr. Layman with certain edits proposed by KCBX to clarify that any emission units listed in the February 13, 2008 and/or the May 21, 2009 permits have continued operating authority. The reissued construction permit will then accurately reflect KCBX's intended operations at the facility.

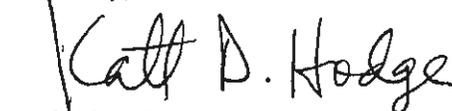
In addition, you asked that KCBX request the inclusion of two 779 bhp diesel generators (designated as DG-1 and DG-2). Therefore, KCBX requests the inclusion of these two units in the reissued construction permit and is providing a 197-FEE form, an APC-628 form, a 270-CAAPP form for the two 779 bhp engines, and a check in the amount of \$5,000.00. Please also consider the enclosed forms as a supplement to the pending FESOP application for this site. Prior to re-issuance of the permit, KCBX respectfully requests to review a draft of the revised construction permit.

Edwin C. Bakowski, P.E.
March 11, 2013
Page 2

Once again, we thank you and your team for your willingness to work with us to reach a mutually beneficial resolution.

If you should have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Kath D. Hodge". The signature is written in a cursive, slightly slanted style.

Katherine D. Hodge

KDH:MTR:kjg
enclosures

pc: Robb Layman, Esq (via hand delivery w/ enclosures)
Bob Bernoteit (via hand delivery w/ enclosures)
Jeff Culver, Esq. (via electronic mail w/ enclosures)



Illinois Environmental Protection Agency

Bureau of Air • 1021 North Grand Avenue East • P.O. Box 19506 • Springfield • Illinois • 62794-9506

FEE DETERMINATION FOR CONSTRUCTION PERMIT APPLICATION

FOR AGENCY USE ONLY	
ID Number: _____ <input type="checkbox"/> Complete <input type="checkbox"/> Incomplete Check Number: _____	Permit #: _____ Date Complete: _____ Account Name: _____

This form is to be used to supply fee information that must accompany all construction permit applications. This application must include payment in full to be deemed complete. Make check or money order payable to the Illinois Environmental Protection Agency, Division of Air Pollution Control - Permit Section at the above address. Do NOT send cash. Refer to instructions (197-INST) for assistance.

Source Information

- | | |
|---|--|
| 1. Source Name: <u>KCBX Terminals Co. South</u> | 3. Source ID #: (if applicable) <u>031600GSF</u> |
| 2. Project Name: <u>Conveyor Addition</u> | 5. Contact Phone #: <u>316.828.7847</u> |
| 4. Contact Name: <u>Terry Steinert</u> | |

Fee Determination

6. The boxes below are automatically calculated.

Section 1 Subtotal	\$0.00	+	Section 2, 3 or 4 Subtotal	\$5,000.00	=	\$5,000.00
						Grand Total

Section 1: Status of Source/Purpose of Submittal

7. Your application will fall under only one of the following five categories described below. Check the box that applies. Proceed to applicable sections. For purposes of this form:

- **Major Source** is a source that is required to obtain a CAAPP permit.
- **Synthetic Minor Source** is a source that has taken limits on potential to emit in a permit to avoid CAAPP permit requirements (e.g., FESOP).
- **Non-Major Source** is a source that is not a major or synthetic minor source.

- | | |
|---|--------------------|
| <input checked="" type="checkbox"/> Existing source without status change or with status change from synthetic minor to major source or vice versa. Proceed to Section 2. | |
| <input type="checkbox"/> Existing non-major source that will become synthetic minor to major source. Proceed to Section 4. | |
| <input type="checkbox"/> New major or synthetic minor source. Proceed to Section 4. | \$0.00 |
| <input type="checkbox"/> New non-major source. Proceed to Section 3. | Section 1 Subtotal |
| <input type="checkbox"/> AGENCY ERROR. If this is a timely request to correct an issued permit that involves only an agency error and if the request is received within the deadline for a permit appeal to the Pollution Control Board. Skip Sections 2, 3 and 4. Proceed directly to Section 5. | |

This agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 ET SEQ. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Section 2: Special Case Filing Fee

8. **Filing Fee.** If the application only addresses one or more of the following, check the appropriate boxes, skip Sections 3 and 4 and proceed directly to Section 5. Otherwise, proceed to Section 3 or 4 as appropriate.

- | | |
|---|--------|
| Addition or replacement of control devices on permitted units. | |
| Pilot projects/trial burns by a permitted unit | |
| Land remediation projects | \$0.00 |
| Revisions related to methodology or timing for emission testing | |
| Minor administrative-type change to a permit | |

Section 3: Fees for Current or Projected Non-Major Sources

- | | | |
|-----|---|------------------------------|
| 9. | This application consists of a single new emission unit or no more than two modified emission units. (\$500 fee) | 9. _____ |
| 10. | This application consists of more than one new emission unit or more than two modified units. (\$1,000 fee) | 10. <u> </u> \$0.00 |
| 11. | This application consists of a new source or emission unit subject to Section 39.2 of the Act (i.e., Local Siting Review); a commercial incinerator or a municipal waste, hazardous waste, or waste tire incinerator; a commercial power generator; or an emission unit designated as a complex source by agency rulemaking. (\$15,000 fee) | 11. <u> </u> \$0.00 |
| 12. | A public hearing is held (see instructions). (\$10,000 fee) | 12. _____ |
| 13. | Section 3 subtotal. (lines 9 through 12 - entered on page 1) | 13. <u> </u> \$0.00 |

Section 4: Fees for Current or Projected Major or Synthetic Minor Sources

Application contains modified emission units only	14. For the first modified emission unit, enter \$2,000.	
	15. Number of additional modified emission units = _____ x \$1,000.	15. <u> </u> \$0.00
	16. Line 14 plus line 15, or \$5,000, whichever is less.	16. <u> </u> \$0.00
Application contains new and/or modified emission units	17. For the first new emission unit, enter \$4,000.	17. <u> </u> \$4,000.00
	18. Number of additional new and/or modified emission units = <u> 1 </u> x \$1,000.	18. <u> </u> \$1,000.00
	19. Line 17 plus line 18, or \$10,000, whichever is less.	19. <u> </u> \$5,000.00
Application contains netting exercise	20. Number of individual pollutants that rely on a netting exercise or contemporaneous emissions decrease to avoid application of PSD or nonattainment area NSR = _____ x \$3,000.	20. <u> </u> \$0.00
Additional Supplemental Fees	21. If the new source or emission unit is subject to Section 39.2 of the Act (i.e. siting); a commercial incinerator or other municipal waste, hazardous waste, or waste tire incinerator; a commercial power generator; or one or more other emission units designated as a complex source by Agency rulemaking, enter \$25,000.	21. _____
	22. If the source is a new major source subject to PSD, enter \$12,000.	22. _____
	23. If the project is a major modification subject to PSD, enter \$6,000.	23. _____
	24. If this is a new major source subject to nonattainment area (NAA) NSR, enter \$20,000.	24. _____
	25. If this is a major modification subject to NAA NSR, enter \$25,000.	25. _____
	26. If the application involves a determination of MACT for a pollutant and the project is not subject to BACT or LAER for the related pollutant under PSD or NSR (e.g., VOM for organic HAP), enter \$5,000 per unit for which a determination is requested or otherwise required. _____ x \$5,000.	26. <u> </u> \$0.00
	27. If a public hearing is held (see instructions), enter \$10,000.	27. _____
28. Section 4 subtotal (line 16 and lines 19 through 28) to be entered on page 1		28. <u> </u> \$5,000.00

Section 5: Certification

NOTE: Applications without a signed certification will be deemed incomplete.

29. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the information contained in this fee application form is true, accurate and complete.

by: _____	_____
Signature	Title of Signatory
David Severson	<u> </u> 3/11/13
Typed or Printed Name of Signatory	Date



Illinois Environmental Protection Agency
 Division Of Air Pollution Control - Permit Section
 P.O. Box 19506
 Springfield, Illinois 62794-9506

Construction Permit Application For a FESOP Source (FORM APC628)	For Illinois EPA use only
	BOA ID No.:
	Application No.:
Date Received:	

This form is to be used to supply information to obtain a construction permit for a proposed project involving a Federally Enforceable State Operating Permit (FESOP) or Synthetic Minor source, including construction of a new FESOP source. Other necessary information must accompany this form as discussed in the "General Instructions For Permit Applications," Form APC-201.

Proposed Project
1. Working Name of Proposed Project: Conveyor Addition
2. Is the project occurring at a source that already has a permit from the Bureau of Air (BOA)? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If Yes, provide BOA ID Number: <u>031600GSF</u>
3. Does this application request a revision to an existing construction permit issued by the BOA? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If Yes, provide Permit Number: <u>07050082</u>
4. Does this application request that the new/modified emission units be incorporated into an existing FESOP issued by the BOA? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If Yes, provide Permit Number: _____

Source Information		
5. Source name:* KCBX Terminals Co. South		
6. Source street address:* 10730 South Burley Avenue		
7. City: Chicago	8. County: Cook	9. Zip code: 60617
ONLY COMPLETE THE FOLLOWING FOR A SOURCE WITHOUT AN ID NUMBER.		
10. Is the source located within city limits? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, provide Township Name: _____		
11. Description of source and product(s) produced: Bulk Materials Storage and Trans-shipment		12. Primary Classification Code of source: SIC: <u>4491</u> or NAICS: _____
13. Latitude (DD:MM:SS.SSSS): 41:42:00		14. Longitude (DD:MM:SS.SSSS): -87:32:42

* If this information different than previous information, then complete a new Form 200-CAAPP to change the source name in initial FESOP application for the source or Form APC-620 for Air Permit Name and/or Ownership Change if the FESOP has been previously issued.

Applicant Information	
15. Who is the applicant? <input type="checkbox"/> Owner <input checked="" type="checkbox"/> Operator	16. All correspondence to: (check one) <input type="checkbox"/> Owner <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Source
17. Applicant's FEIN: 48-1082551	18. Attention name and/or title for written correspondence: Brandon Walker

Owner Information*		
19. Name: KM Railways, LLC		
20. Address: 4111 East 37th Street North		
21. City: Wichita	22. State: KS	23. Zip code: 67220

* If this information different than previous information, then complete Form 272-CAAPP for a Request for Ownership Change for CAAPP Permit for an initial FESOP application for the source or Form APC-620 for Air Permit Name and/or Ownership Change if the FESOP has been previously issued.

Operator Information (If Different from Owner)*		
24. Name: KCBX Terminals Co.		
25. Address: 10730 South Burley Avenue		
26. City: Chicago	27. State: IL	28. Zip code: 60617

* If this information different than previous information, then complete a new Form 200-CAAPP to change the source name in initial FESOP application for the source or Form APC-620 for Air Permit Name and/or Ownership Change if the FESOP has been previously issued.

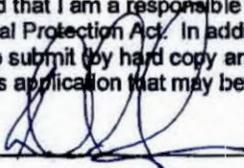
Technical Contacts for Application	
29. Preferred technical contact: (check one) <input checked="" type="checkbox"/> Applicant's contact <input type="checkbox"/> Consultant	
30. Applicant's technical contact person for application: Terry Steinert	
31. Contact person's telephone number 316.828.7847	32. Contact person's email address: steine3t@kochind.com
33. Applicant's consultant for application:	
34. Consultant's telephone number:	35. Consultant's email address:

Review Of Contents of the Application	
36. Is the emission unit covered by this application already constructed? If "yes", provide the date construction was completed:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Note: The Illinois EPA is unable to issue a construction permit for a emission unit that has already been constructed.	
37. Does the application include a narrative description of the proposed project?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
38. Does the application contain a list or summary that clearly identifies the emission units and air pollution control equipment that are part of the project?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
39. Does the application include process flow diagram(s) for the project showing new and modified emission units and control equipment and related existing equipment and their relationships?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
40. If the project is at a source that has not previously received a permit from the BOA, does the application include a source description, plot plan and site map?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA

Review Of Contents of the Application (continued)	
41. Does the application include relevant information for the proposed project as requested on Illinois EPA, BOA application forms (or otherwise contain all the relevant information)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
42. Does the application identify and address all applicable or potentially applicable emissions standards, including: a. State emission standards (35 IAC Chapter I, Subtitle B); b. Federal New Source Performance Standards (40 CFR Part 60); c. Federal standards for HAPs (40 CFR Parts 61 and 63)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
43. Does the application address whether the proposed project or the source could be a major project for Prevention of Significant Deterioration (PSD), 40 CFR 52.21?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
44. Does the application address for which pollutant(s) the proposed project or the source could be a major project for PSD, 40 CFR 52.21?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
45. Does the application address whether the proposed project or the source could be a major project for "Nonattainment New Source Review," (NA NSR), 35 IAC Part 203?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
46. Does the application address for which pollutant(s) the proposed project or the source could be a major project for NA NSR, 35 IAC Part 203?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
47. Does the application address whether the proposed project or the source could potentially be subject to federal Maximum Achievable Control Technology (MACT) standard under 40 CFR Part 63 for Hazardous Air Pollutants (HAP) and identify the standard that could be applicable?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A* * Source not major <input checked="" type="checkbox"/> Project not major <input checked="" type="checkbox"/>
48. Does the application identify the HAP(s) from the proposed project or the source that would trigger the applicability of a MACT standard under 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
49. Does the application include a summary of the current and the future potential emissions of the source after the proposed project has been completed for each criteria air pollutant and/or HAP (tons/year)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A* * Applicability of PSD, NA NSR or 40 CFR 63 not applicable to the source's emissions.
50. Does the application include a summary of the requested permitted annual emissions of the proposed project for the new and modified emission units (tons/year)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A* * Project does not involve an increase in emissions from new or modified emission units.
51. Does the application include a summary of the requested permitted production, throughput, fuel, or raw material usage limits that correspond to the annual emissions limits of the proposed project for the new and modified emission units?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A* * Project does not involve an increase in emissions from new or modified emission units.
52. Does the application include sample calculations or methodology for the emission estimations and the requested emission limits?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
53. Does the application address the relationships with and implications of the proposed project for the source's FESOP?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A* *FESOP not yet issued.
54. If the application contains information that is considered a TRADE SECRET, has such information been properly marked and claimed and other requirements to perfect such a claim been satisfied in accordance with 35 IAC Part 130?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A* * No information in the application is claimed to be a TRADE SECRET
Note: *Claimed information will not be legally protected from disclosure to the public if it is not properly claimed or does not qualify as trade secret information.	

Review Of Contents of the Application (continued)	
55. If the source is located in a county other than Cook County, are two separate copies of this application being submitted?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
56. If the source is located in Cook County, are three separate copies of this application being submitted?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
57. Does the application include a completed "FEE DETERMINATION FOR CONSTRUCTION PERMIT APPLICATION," Form 197-FEE, for the emission units and control equipment for which a permit for construction or modification is being sought?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
58. Does the application include a check in the proper amount for payment of the Construction permit fee?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Note: Answering "No" to Items 36 through 58 may result in the application being deemed incomplete.

Signature Block
Pursuant to 35 IAC 201.159, all applications and supplements thereto shall be signed by the owner and operator of the source, or their authorized agent, and shall be accompanied by evidence of authority to sign the application. Applications without a signed certification will be deemed incomplete.
<p>59. Authorized Signature:</p> <p>I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete and that I am a responsible official for the source, as defined by Section 39.5(1) of the Environmental Protection Act. In addition, the technical contact person identified above is authorized to submit (by hard copy and/or by electronic copy) any supplemental information related to this application that may be requested by the Illinois EPA.</p> <p>BY:  _____</p> <p style="text-align: center;">AUTHORIZED SIGNATURE</p> <p>President, KCBX Terminals Co. _____</p> <p style="text-align: center;">TITLE OF SIGNATORY</p> <p>David Severson _____</p> <p style="text-align: center;">TYPED OR PRINTED NAME OF SIGNATORY</p> <p style="text-align: right;">3/11/13 _____</p> <p style="text-align: right;">DATE</p>



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
 P.O. BOX 19506
 SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE	
Revision #:	_____
Date:	____ / ____ / ____
Page	_____ of _____
Source Designation:	_____

STATIONARY INTERNAL COMBUSTION ENGINE OR TURBINE DATA AND INFORMATION	ID NUMBER:
	EMISSION POINT #:
	DATE:

SOURCE INFORMATION	
1) SOURCE NAME: KCBX Terminals Company	
2) DATE FORM PREPARED: 03/01/13	3) SOURCE ID NO. (IF KNOWN): 031600GSF

GENERAL INFORMATION	
4) NAME OF EMISSION UNIT: Diesel Generator (DG-1 and DG-2) (500 KW each; 779 bhp each)	
5) NAME OF PROCESS: Material Handling	
6) DESCRIPTION OF PROCESS: Generate power to operate on-site equipment	
7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR ACTIVITY ACCOMPLISHED: Generate power for equipment operation	
8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT: DG-1 and DG-2	
9) MANUFACTURER OF EMISSION UNIT (IF KNOWN): Caterpillar	
10) MODEL NUMBER (IF KNOWN): XQ500	11) SERIAL NUMBER (IF KNOWN): TBD
12) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED) TBD	a) CONSTRUCTION (MONTH/YEAR): TBD
	b) OPERATION (MONTH/YEAR): TBD
	c) LATEST MODIFICATION (MONTH/YEAR): TBD
13) DESCRIPTION OF MODIFICATION (IF APPLICABLE): NA	

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE

14) DOES THE EMISSION UNIT HAVE MORE THAN ONE MODE OF OPERATION? YES NO
 IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE PROCESS EMISSION UNIT FORM 270-CAAPP MUST BE COMPLETED FOR EACH MODE):

15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT):

NA

16) WILL EMISSIONS DURING STARTUP EXCEED EITHER THE ALLOWABLE EMISSION RATE PURSUANT TO A SPECIFIC RULE, OR THE ALLOWABLE EMISSION LIMIT AS ESTABLISHED BY AN EXISTING OR PROPOSED PERMIT CONDITION? YES NO
 IF YES, COMPLETE AND ATTACH FORM 203-CAAPP, "REQUEST TO OPERATE WITH EXCESS EMISSIONS DURING STARTUP OF EQUIPMENT".

17) PROVIDE ANY LIMITATIONS ON SOURCE OPERATION AFFECTING EMISSIONS OR ANY WORK PRACTICE STANDARDS (E.G., ONLY ONE UNIT IS OPERATED AT A TIME):

None.

OPERATING INFORMATION				
18) ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSION RELATED, FROM WHICH THE FOLLOWING OPERATING INFORMATION, MATERIAL USAGE INFORMATION AND FUEL USAGE DATA WERE BASED AND LABEL AS EXHIBIT 270-1. REFER TO SPECIAL NOTES OF FORM 202-CAAPP.				
19a) MAXIMUM OPERATING HOURS	HOURS/DAY:	DAYS/WEEK:	WEEKS/YEAR:	
8760	24	7	52	
b) TYPICAL OPERATING HOURS	HOURS/DAY:	DAYS/WEEK:	WEEKS/YEAR:	
TBD	TBD	TBD	TBD	
20) ANNUAL THROUGHPUT	DEC-FEB(%):	MAR-MAY(%):	JUN-AUG(%):	SEP-NOV(%):
	25	25	25	25

FIRING RATE INFORMATION			
21) DESCRIPTION (CHECK AS MANY AS APPLY):	<input checked="" type="checkbox"/> INTERNAL COMBUSTION ENGINE	<input type="checkbox"/> SPARK IGNITED ENGINE	<input checked="" type="checkbox"/> RECIPROCATING ENGINE
	<input type="checkbox"/> COMBINED CYCLE TURBINE	<input type="checkbox"/> STATIONARY TURBINE	<input type="checkbox"/> SIMPLE CYCLE TURBINE
	<input type="checkbox"/> REGENERATIVE CYCLE TURBINE	<input type="checkbox"/> LARGE BORE ENGINE	
22) AIR CHARGING:	<input checked="" type="checkbox"/> NATURALLY ASPIRATED	<input type="checkbox"/> TURBOCHARGED	23) NO. OF CYLINDERS PER ENGINE: 6 Cylinders per unit
<input type="checkbox"/> BLOWER SCAVENGED			
24a) RATED OR DESIGN HEAT INPUT CAPACITY (MILLION BTU/HR):			
4.92			

24b) IS MORE THAN ONE FUEL FIRED AT A TIME? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
IF YES, EXPLAIN:				
	NATURAL GAS	FUEL OIL	COAL	OTHER
c) SINGLE FUEL (MAXIMUM - MILLION BTU/HOUR)	NA	4.92	NA	NA
d) SINGLE FUEL (TYPICAL - MILLION BTU/HOUR)	NA	4.92	NA	NA
e) COMBINED FUEL (TYPICAL - MILLION BTU/HOUR) (IF APPLICABLE)	NA	NA	NA	NA
25a) BASE LOAD (KW): 500 KW	b) TIME SPENT AT THIS LOAD (%): 100			
26a) PEAK LOAD (KW): 500 KW	b) TIME SPENT AT THIS LOAD (%): 100			
27a) OTHER LOAD (KW): NA	b) TIME SPENT AT THIS LOAD (%): NA			

NATURAL GAS FIRING		
28a) CURRENT ORIGIN OF NATURAL GAS:		
<input type="checkbox"/> PIPELINE (FIRM CONTRACT)	<input type="checkbox"/> BY-PRODUCT, SPECIFY ORIGIN:	
<input type="checkbox"/> PIPELINE (INTERRUPTIBLE SUPPLY CONTRACT)	<input type="checkbox"/> OTHER, - SPECIFY: NA	
b) TYPICAL HEAT CONTENT (BTU/SCF):		
c) MAXIMUM CONSUMPTION	SCF/MONTH:	SCF/YEAR:
d) TYPICAL CONSUMPTION	SCF/MONTH:	SCF/YEAR:

OIL FIRING		
29a) OIL TYPE (CHECK ONE):		
<input type="checkbox"/> NO. 1	<input checked="" type="checkbox"/> NO. 2	<input type="checkbox"/> NO. 4
<input type="checkbox"/> NO. 5	<input type="checkbox"/> NO. 6	<input type="checkbox"/> OTHER, SPECIFY (INCLUDE GENERATOR OR SUPPLIER):
b) TYPICAL HEAT CONTENT: 137,000	c) IS OIL USED ONLY AS A RESERVE FUEL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<input type="checkbox"/> BTU/LB - OR - <input checked="" type="checkbox"/> BTU/GAL		
d) TYPICAL SULFUR CONTENT AS FIRED (WT %): 0.0015	e) TYPICAL ASH CONTENT AS FIRED (WT %): 0.0	
f) MAXIMUM CONSUMPTION	GAL/MONTH: 25,800	GAL/YEAR: 314,500
g) TYPICAL CONSUMPTION	GAL/MONTH: TBD	GAL/YEAR: TBD
h) FIRING DIRECTION:		
<input type="checkbox"/> HORIZONTAL	<input type="checkbox"/> TANGENTIAL	<input type="checkbox"/> OTHER, SPECIFY:

APPLICATION PAGE _____

Printed on Recycled Paper
270-CAAPP

OTHER FUEL FIRING		
30a) OTHER FUEL FIRING	TYPE	SUPPLIER
NA	a) <input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
	b) <input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
b) TYPICAL HEAT CONTENT (SPECIFY UNITS):		c) TYPICAL NITROGEN CONTENT AS FIRED (WT %):
d) TYPICAL SULFUR CONTENT AS FIRED (WT %):		e) TYPICAL ASH CONTENT AS FIRED (WT %):
f) MAXIMUM CONSUMPTION	(SPECIFY UNITS):	(SPECIFY UNITS):
g) TYPICAL CONSUMPTION	(SPECIFY UNITS):	(SPECIFY UNITS):

COMBUSTION CONTROL INFORMATION		
31a) IS THERE ANY TYPE OF INTERNAL CONTROL USED TO REDUCE EMISSIONS ? (A 260-CAAPP FORM MUST BE COMPLETED FOR EXTERNAL CONTROLS)		
		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
IF NO, GO TO ITEM 33.		
b) TOTAL % REDUCTION IN EMISSIONS:		
<input type="checkbox"/> NO _x	<input type="checkbox"/> CO	<input type="checkbox"/> VOM
_____ %	_____ %	_____ %
<input type="checkbox"/> PM ₁₀	<input type="checkbox"/> PM	<input type="checkbox"/> SO ₂
_____ %	_____ %	_____ %
c) CHECK THE FOLLOWING THAT APPLY:		
<input type="checkbox"/> WATER INJECTION WATER TO FUEL RATIO:	<input type="checkbox"/> FLUE GAS RECIRCULATION % RECIRCULATED	
_____	_____	
<input type="checkbox"/> OXYGEN TRIM AIR TO FUEL RATIO:	<input type="checkbox"/> REDUCED RESIDENCE TIME (SPECIFY SEC):	
_____	_____	
<input type="checkbox"/> REDUCED TEMPERATURE (SPECIFY DEGREES F):	<input type="checkbox"/> FUEL INJECTION RETARD (SPECIFY DEGREES):	
_____	_____	
<input type="checkbox"/> (NON)SELECTIVE CATALYTIC REDUCTION (260-CAAPP)	<input type="checkbox"/> OTHER, EXPLAIN:	

d) MAXIMUM START-UPS IN A YEAR?		e) TIME FROM START UP TO STEADY LOAD (MINUTES OR HOURS):
_____		_____

APPLICABLE RULES

32) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., SULFUR DIOXIDE , CFR SUBPART GG, 0.015% BY VOL. AT 15% O₂):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
PM	35 IAC 212.123	< 30% Opacity
SO2	35 IAC 214.301	not to exceed 2000 ppm
NSPS Regulated Pollutants	40 CFR Part 60 Subpart IIII	See 40 CFR Part 60 Subpart IIII for Limits

33) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
PM and SO2	35 IAC 201.301	Maintain records as required by Subparts
NSPS Regulated Pollutants	40 CFR Part 60 Subpart IIII	See Subpart IIII

34) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
All	Deviation Reporting	Report deviations from applicable rule within 30 days.
NSPS Regulated Pollutants	40 CFR Part 60 Subpart IIII	See Subpart IIII

35) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
NSPS Regulated Pollutants	40 CFR Part 60 Subpart IIII	See Subpart IIII

36) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT :

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
NSPS Regulated Pollutants	40 CFR Part 60 Subpart IIII	See Subpart IIII

37) DOES THE EMISSION UNIT QUALIFY FOR AN EXEMPTION FROM AN OTHERWISE APPLICABLE RULE? YES NO

See Below

IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 270-2, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION. DG-1 and DG-2 are exempt from Construction permitting per 35 IAC 201.146(i)

COMPLIANCE INFORMATION

38) IS THE EMISSION UNIT IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? YES NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE – ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

39) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

Manufacturer certification of compliance with NSPS requirements assures compliance with Illinois requirements.

40) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

Records will be kept to fuel consumption and operating hours on a monthly basis. The units will use ultra low sulfur diesel. Records will be maintained at the site for at least five years.

TESTING, MONITORING, RECORDKEEPING AND REPORTING

41a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
Operation Hrs.	hours	meter	monthly
ULSD	% Sulfur	Fuel Supplier Delivery	Upon delivery
		Ticket	

41b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
Operation Hrs.	log	operator	EHS manager
ULSD	fuel supplier	fuel supplier	EHS manager
	delivery ticket		

c) IS COMPLIANCE OF THE EMISSION UNIT READILY DEMONSTRATED BY REVIEW OF THE RECORDS? YES NO

IF NO, EXPLAIN:

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND SUBMITTAL TO THE AGENCY UPON REQUEST? YES NO

IF NO, EXPLAIN:

42a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

Hour Meter

b) WHAT PARAMETER(S) IS(ARE) BEING MONITORED (E.G., OPACITY)?

Hours of operation

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., IN STACK MONITOR):

Hour meters are located on each engine (DG-1 and DG-2).

42d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? YES NO
 IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:
 Hour meters on DG-1 and DG-2

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? YES NO
 IF NO, EXPLAIN:
 Meters are timing devices that do not need calibration.

f) IS EACH MONITOR OPERATED AT ALL TIMES THE ASSOCIATED EMISSION UNIT IS IN OPERATION? YES NO
 IF NO, EXPLAIN:

43) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 220-4:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
NA				

44) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY
Exceedance of Rule	Deviation Report	Within 30 days of exceedance

(45)EMISSION INFORMATION

REGULATED AIR POLLUTANT	<input checked="" type="checkbox"/> ¹ ACTUAL EMISSION RATE <input type="checkbox"/> ¹ UNCONTROLLED EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE			² PERMITTED EMISSION RATE	
	LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	³ OTHER TERMS	³ OTHER TERMS	⁴ DM	⁵ RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	RATE (UNITS)	TONS PER YEAR (TONS/YR)
CARBON MONOXIDE (CO)	MAXIMUM:		280 g/hr			()				
	TYPICAL:		TBD			()				
LEAD	MAXIMUM:					()				
	TYPICAL:					()				
NITROGEN OXIDES (NO _x) (as NO ₂)	MAXIMUM:		1958 g/hr			()				
	TYPICAL:		TBD			()				
PARTICULATE MATTER (PART)	MAXIMUM:		22.6 g/hr			()				
	TYPICAL:		TBD			()				
PARTICULATE MATTER <= 10 MICROMETERS (PM10)	MAXIMUM:					()				
	TYPICAL:					()				
SULFUR DIOXIDE (SO ₂)	MAXIMUM:					()				
	TYPICAL:					()				
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:					()				
	TYPICAL:					()				
OTHER, SPECIFY: HC	MAXIMUM:		19 g/hr			()				
	TYPICAL:		TBD			()				
EXAMPLE: PARTICULATE MATTER	MAXIMUM:	5.00	21.9	0.3 GR/DSCF	1	6.0 (LBS/HR)	212.321	26.28	5.5 (LBS/HR)	22
	TYPICAL:	4.00	14.4	0.24 GR/DSCF	4	5.5 (LBS/HR)	212.321	19.80		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 270-3.

¹CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.

²PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.

³PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)

⁴DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)

⁵RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

APPLICATION PAGE _____

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270-CAAPP

EXHAUST POINT INFORMATION		
THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.		
47) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:		
48) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS. Portable		
49) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):		
50) DISCHARGE HEIGHT ABOVE GRADE (FT):		
51) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):		
52) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA.		
53) EXIT GAS FLOW RATE	a) MAXIMUM (ACFM):	b) TYPICAL (ACFM):
54) EXIT GAS TEMPERATURE	a) MAXIMUM (°F):	b) TYPICAL (°F):
55) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD):		
56) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:		
NAME		FLOW DIAGRAM DESIGNATION
a)		
b)		
c)		
d)		
e)		
THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE.		
57a) LATITUDE:		b) LONGITUDE:
58) UTM ZONE:	b) UTM VERTICAL (KM):	c) UTM HORIZONTAL (KM):

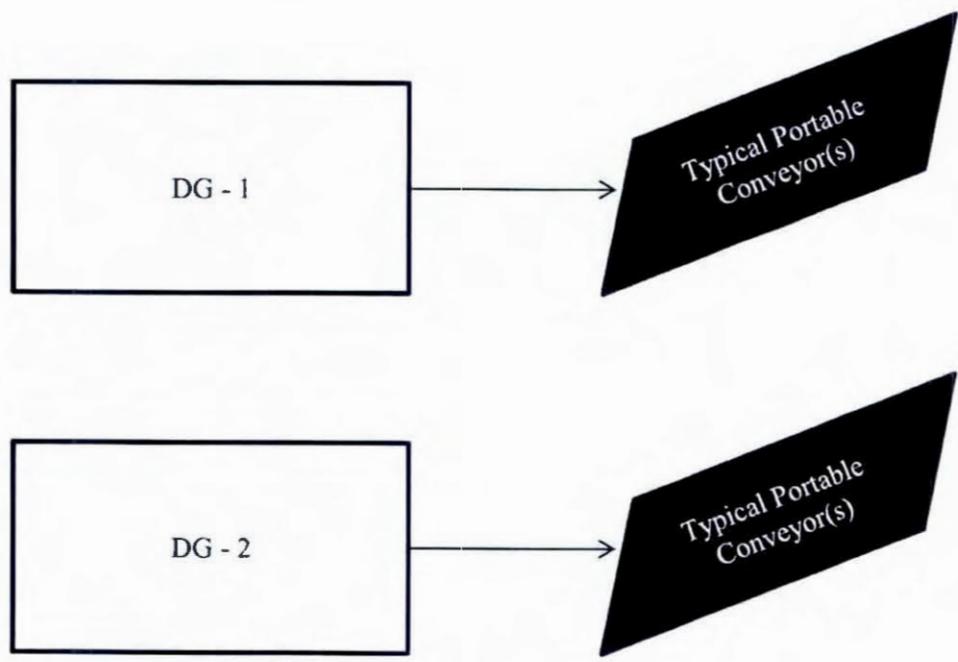


Figure 1 - Process Flow Diagram for DG-1 and DG-2

PERFORMANCE DATA [JJF00671]

MARCH 04, 2013

(JJF00671)-ENGINE (G6B19030)-GENERATOR (X5M00224)-GENSET

For Help Desk Phone Numbers [Click here](#)

Perf No: EM0177

Change Level: (

General Heat Rejection Emissions Regulatory Altitude Derate Cross Reference Perf Param Ref

[View PDF](#)

SALES MODEL:	C15	COMBUSTION:	D1
ENGINE POWER (BHP):	779	ENGINE SPEED (RPM):	1,800
GEN POWER WITH FAN (EKW):	500.0	HERTZ:	60
COMPRESSION RATIO:	16.0	FAN POWER (HP):	26.8
APPLICATION:	PACKAGED GENSET	ASPIRATION:	TA
RATING LEVEL:	STANDBY	AFTERCOOLER TYPE:	ATAAC
PUMP QUANTITY:	1	AFTERCOOLER CIRCUIT TYPE:	JW+OC, ATA/
FUEL TYPE:	DIESEL	INLET MANIFOLD AIR TEMP (F):	122
MANIFOLD TYPE:	DRY	JACKET WATER TEMP (F):	192.2
GOVERNOR TYPE:	ELEC	TURBO CONFIGURATION:	SINGLE
INJECTOR TYPE:	EUI	TURBO QUANTITY:	1
REF EXH STACK DIAMETER (IN):	6	TURBOCHARGER MODEL:	GTB4708-1.4
MAX OPERATING ALTITUDE (FT):	4,541	CERTIFICATION YEAR:	2011
		PISTON SPD @ RATED ENG SPD (FT/MIN):	2,025.0

General Performance Data [Top](#)

Note(s)

INLET MANIFOLD AIR TEMPERATURE ("INLET MFLD TEMP") FOR THIS CONFIGURATION IS MEASURED AT THE OUTLET OF THE AFTERCOOLER.

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	BRAKE MEAN EFF PRES (BMEP)	BRAKE SPEC FUEL CONSUMPTN (BSFC)	VOL FUEL CONSUMPTN (VFC)	INLET MFLD PRES	INLET MFLD TEMP	EXH MFLD TEMP	EXH MFLD PRES	ENGINE OUTLET TEMP
EKW	%	BHP	PSI	LB/BHP-HR	GAL/HR	IN-HG	DEG F	DEG F	IN-HG	DEG F
500.0	100	736	349	0.339	35.7	73.6	120.1	1,259.6	74.9	911.7
450.0	90	664	315	0.344	32.7	70.6	117.9	1,210.4	71.5	875.7
400.0	80	593	281	0.350	29.6	66.7	114.5	1,159.2	67.3	838.4
375.0	75	558	265	0.353	28.1	64.5	112.6	1,133.8	64.8	821.6
350.0	70	522	248	0.356	26.5	61.9	110.6	1,108.3	62.0	805.4
300.0	60	452	214	0.363	23.4	55.8	106.0	1,057.5	55.4	773.8
250.0	50	382	181	0.371	20.2	47.8	100.4	1,006.2	47.2	741.7
200.0	40	313	149	0.375	16.8	35.7	92.8	944.5	35.7	707.2
150.0	30	244	116	0.382	13.3	23.9	85.7	870.5	25.0	670.9
125.0	25	210	99	0.389	11.6	18.6	82.9	828.4	20.6	651.9
100.0	20	174	83	0.401	10.0	14.6	81.0	773.7	17.5	618.1
50.0	10	102	48	0.466	6.8	9.4	79.4	626.6	14.7	507.8

GENSET POWER WITH	PERCENT LOAD	ENGINE POWER	COMPRESSOR OUTLET PRES	COMPRESSOR OUTLET TEMP	WET INLET AIR VOL	ENGINE OUTLET WET EXH GAS VOL	WET INLET AIR MASS	WET EXH GAS MASS	WET EXH VOL FLOW RATE (32 DEG F AND	DRY EXH VOL FLOW RATE (32 DEG F AN
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FAN					FLOW RATE	FLOW RATE	FLOW RATE	FLOW RATE	29.98 IN HG)	29.98 IN HG)
EKW	%	BHP	IN-HG	DEG F	CFM	CFM	LB/HR	LB/HR	FT3/MIN	FT3/MIN
500.0	100	736	77	425.3	1,241.2	3,175.4	5,374.8	5,624.8	1,138.5	1,022.6
450.0	90	664	74	411.6	1,217.8	3,036.5	5,265.5	5,494.7	1,118.0	1,009.8
400.0	80	593	70	395.6	1,186.9	2,876.9	5,119.9	5,327.4	1,089.7	990.6
375.0	75	558	68	387.1	1,168.4	2,793.6	5,033.1	5,230.0	1,072.0	977.2
350.0	70	522	65	377.4	1,145.2	2,702.6	4,925.8	5,111.8	1,050.4	960.0
300.0	60	452	59	354.2	1,084.6	2,497.0	4,649.3	4,813.4	995.3	913.8
250.0	50	382	51	323.4	996.2	2,244.1	4,252.4	4,394.0	918.4	846.0
200.0	40	313	38	272.5	841.8	1,877.0	3,575.5	3,693.2	790.9	728.4
150.0	30	244	26	221.1	693.1	1,513.0	2,926.3	3,019.8	658.0	607.2
125.0	25	210	20	197.7	630.4	1,346.9	2,652.9	2,734.5	595.8	551.2
100.0	20	174	16	178.8	587.5	1,210.6	2,466.4	2,536.4	552.3	513.5
50.0	10	102	11	151.3	548.6	1,005.9	2,299.0	2,346.4	511.2	482.5

Heat Rejection Data Top

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	REJECTION TO JACKET WATER	REJECTION TO ATMOSPHERE	REJECTION TO EXH	EXHAUST RECOVERY TO 350F	FROM OIL COOLER	FROM AFTERCOOLER	WORK ENERGY	LOW HEAT VALUE ENERGY	HIG HEAT VALUE ENERGY
EKW	%	BHP	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU
500.0	100	736	14,286	5,092	24,449	13,541	4,081	6,568	31,227	76,622	81,6
450.0	90	664	13,063	4,609	22,707	12,313	3,738	6,194	28,178	70,171	74,7
400.0	80	593	11,849	4,057	20,897	11,029	3,386	5,764	25,158	63,576	67,7
375.0	75	558	11,250	3,829	19,961	10,427	3,211	5,532	23,657	60,294	64,2
350.0	70	522	10,657	3,619	19,006	9,817	3,035	5,262	22,154	56,980	60,6
300.0	60	452	9,498	3,247	17,042	8,564	2,679	4,621	19,168	50,294	53,5
250.0	50	382	8,398	2,951	14,907	7,195	2,313	3,797	16,198	43,418	46,2
200.0	40	313	7,486	2,783	12,263	5,493	1,920	2,573	13,288	36,042	38,3
150.0	30	244	6,502	2,580	9,481	4,021	1,526	1,587	10,366	28,647	30,5
125.0	25	210	5,939	2,435	8,143	3,419	1,331	1,220	8,889	24,995	26,6
100.0	20	174	5,288	2,233	6,971	2,802	1,143	967	7,392	21,450	22,8
50.0	10	102	3,794	1,702	5,016	1,502	775	662	4,319	14,544	15,4

Emissions Data Top

Units Filter All Units 

RATED SPEED NOMINAL DATA: 1800 RPM

GENSET POWER WITH FAN	EKW	500.0	375.0	250.0	125.0	50.0
ENGINE POWER	BHP	736	558	382	210	102
PERCENT LOAD	%	100	75	50	25	10
TOTAL NOX (AS NO2)	G/HR	1,958	1,229	693	531	444
TOTAL CO	G/HR	280	156	143	209	228
TOTAL HC	G/HR	19	24	31	33	43
TOTAL CO2	KG/HR	357	280	203	114	66
PART MATTER	G/HR	22.6	15.4	20.8	14.9	12.7
TOTAL NOX (AS NO2)	(CORR 5% O2) MG/NM3	1,277.2	1,022.3	783.3	1,041.5	1,540.7
TOTAL CO	(CORR 5% O2) MG/NM3	182.7	126.5	162.4	418.5	803.2
TOTAL HC	(CORR 5% O2) MG/NM3	10.6	17.3	31.2	59.0	135.0
PART MATTER	(CORR 5% O2) MG/NM3	11.9	10.8	20.0	25.0	39.7
TOTAL NOX (AS NO2)	(CORR 5% O2) PPM	622	498	382	507	750
TOTAL CO	(CORR 5% O2) PPM	146	101	130	335	643
TOTAL HC	(CORR 5% O2) PPM	20	32	58	110	252
FORMALDEHYDE	(CORR 15% O2) PPM	0.43	0.55	0.95	1.23	2.71
ACROLEIN	(CORR 15% O2) PPM	0.22	0.20	0.07	0.15	0.03

ACETALDEHYDE	(CORR 15% O2)	PPM	0.32	0.60	0.87	0.96	2.08
METHANOL	(CORR 15% O2)	PPM	0.21	0.11	0.13	0.15	0.41
TOTAL NOX (AS NO2)		G/HP-HR	2.68	2.22	1.82	2.54	4.37
TOTAL CO		G/HP-HR	0.38	0.28	0.37	1.00	2.25
TOTAL HC		G/HP-HR	0.03	0.04	0.08	0.16	0.43
PART MATTER		G/HP-HR	0.03	0.03	0.05	0.07	0.12
TOTAL NOX (AS NO2)		LB/HR	4.32	2.71	1.53	1.17	0.98
TOTAL CO		LB/HR	0.62	0.34	0.31	0.46	0.50
TOTAL HC		LB/HR	0.04	0.05	0.07	0.07	0.10
TOTAL CO2		LB/HR	787	617	448	252	145
PART MATTER		LB/HR	0.05	0.03	0.05	0.03	0.03
OXYGEN IN EXH		%	7.2	9.5	11.2	12.0	15.0
DRY SMOKE OPACITY		%	0.8	0.7	0.9	0.9	0.8
BOSCH SMOKE NUMBER			0.48	0.36	0.55	0.57	0.49

Regulatory Information [Top](#)

EPA TIER 4 INTERIM

2011 - 2014

GASEOUS EMISSIONS DATA MEASUREMENTS ARE CONSISTENT WITH THOSE DESCRIBED IN EPA 40 CFR PART 1039 SUBPART F AN ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. GASEOUS EMISSIONS LIMIT VALUES ARE WEIGHTED CYCLE AVERAGES AND ARE IN COMPLIANCE WITH THE NON-ROAD REGULATIONS.

Locality	Agency	Regulation	Tier/Stage	Max Limits - G/BKW - HR
U.S. (INCL CALIF)	EPA	NON-ROAD GENSET	TIER 4 INTERIM	CO: 3.5 NOx: 3.5 HC: 0.4 PM: 0.10

Altitude Derate Data [Top](#)

ALTITUDE CORRECTED POWER CAPABILITY (BHP)

AMBIENT OPERATING TEMP (F)	50	60	70	80	90	100	110	120	130	NORMAL
ALTITUDE (FT)										
0	779	779	779	779	778	774	775	777	764	779
1,000	779	779	779	777	774	772	772	761	741	779
2,000	779	779	776	772	770	770	756	680	594	776
3,000	779	775	771	768	760	735	679	614	558	772
4,000	774	770	763	725	684	638	595	543	486	768
5,000	764	749	705	646	597	544	486	478	478	746
6,000	753	717	649	587	536	488	478	478	478	730
7,000	742	691	626	573	529	495	480	479	479	732
8,000	652	630	602	576	556	544	542	541	523	652
9,000	602	590	575	560	546	538	534	524	505	604
10,000	582	575	566	556	543	533	522	504	488	585
11,000	580	574	566	553	536	518	501	486	478	585
12,000	575	562	546	528	514	497	483	478	477	583
13,000	555	536	518	504	492	480	478	477	477	578
14,000	522	504	489	483	478	478	477	477	477	570
15,000	479	478	478	478	478	477	477	477	477	549

Cross Reference [Top](#)

Engine Arrangement

Arrangement Number	Effective Serial Number	Engineering Model	Engineering Model Version
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3341000	JJF00001	GS533	-
3431944	JJF00001	PS045	-

Test Specification Data

Test Spec	Setting	Effective Serial Number	Engine Arrangement	Governor Type	Default Low Idle Speed	Default High Idle Speed
OK9868	PP6870	JJF00001	3341000	ELEC		

Performance Parameter Reference [Top](#)Parameters Reference: **DM9600 - 05****PERFORMANCE DEFINITIONS**

PERFORMANCE DEFINITIONS DM9600

APPLICATION:

Engine performance tolerance values below are representative of a typical production engine tested in a calibrated dynamometer test cell at SAE J1995 standard reference conditions. Caterpillar maintains ISO9001:2000 certified quality management systems for engine test facilities to assure accurate calibration of test equipment. Engine test data is corrected in accordance with SAE J1995. Additional reference material SAE J1228, J1349, ISO 8665, 3046-1:2002E, 3046-3:1989, 1585, 2534, 2288, and 9249 may apply in part or are similar to SAE J1995. Special engine rating request(SERR)test data shall be noted.

PERFORMANCE PARAMETER TOLERANCE FACTORS:

Power +/- 3%
 Torque +/- 3%
 Exhaust stack temperature +/- 8%
 Inlet airflow +/- 5%
 Intake manifold pressure-gage +/- 10%
 Exhaust flow +/- 6%
 Specific fuel consumption +/- 3%
 Fuel rate +/- 5%
 Heat rejection +/- 5%
 Heat rejection exhaust only +/- 10%

Torque is included for truck and industrial applications, do not use for Gen Set or steady state applications.

On C7 - C18 engines, at speeds of 1100 RPM and under these values are provided for reference only, and may not meet the tolerance listed.

These values do not apply to C280/3600. For these models, see the tolerances listed below.

C280/3600 HEAT REJECTION TOLERANCE FACTORS:

Heat rejection +/- 10%
 Heat rejection to Atmosphere +/- 50%
 Heat rejection to Lube Oil +/- 20%
 Heat rejection to Aftercooler +/- 5%

TEST CELL TRANSDUCER TOLERANCE FACTORS:

Torque +/- 0.5%
 Speed +/- 0.2%
 Fuel flow +/- 1.0%
 Temperature +/- 2.0 C degrees
 Intake manifold pressure +/- 0.1 kPa

OBSERVED ENGINE PERFORMANCE IS CORRECTED TO SAE J1995 REFERENCE AIR AND FUEL CONDITIONS.

REFERENCE ATMOSPHERIC INLET AIR**FOR 3500 ENGINES AND SMALLER**

SAE J11228 reference atmospheric pressure is 100 KPA (29.61 in hg) and standard temperature is 25 (77) at 60% relative humidity.

FOR 3600 ENGINES

Engine rating obtained and presented in accordance with ISO 3046/1 and SAE J1995 JAN90 standard reference conditions of 25, 100 KPA 30% relative humidity and 150M altitude at the stated aftercooler water temperature.

MEASUREMENT LOCATION FOR INLET AIR TEMPERATURE

Location for air temperature measurement air cleaner inlet at stabilized operating conditions.

REFERENCE EXHAUST STACK DIAMETER

The Reference Exhaust Stack Diameter published with this dataset is only used for the calculation of Smoke Opacity values displayed in this dataset. This value does not necessarily represent the actual stack diameter of the engine due to the variety of exhaust stack adapter options available. Consult the price list, engine order or general dimension drawings for the actual stack diameter size ordered or options available.

REFERENCE FUEL**DIESEL**

Reference fuel is #2 distillate diesel with a 35API gravity; A lower heating value is 42,780 KJ/KG (18,390 BTU/LB) when used at 29 (84.2), where the density is 838.9 G/Liter (7.001 Lbs/Gal).

GAS

Reference natural gas fuel has a lower heating value of 33.74 KJ/L (905 BTU/CU Ft). Low BTU ratings are based on 18.64 KJ/L (500 BTU/CU FT) lower heating value gas. Propane ratings are based on 87.56 KJ/L (2350 BTU/CU Ft) lower heating value gas.

ENGINE POWER (NET) IS THE CORRECTED FLYWHEEL POWER (GROSS) LESS EXTERNAL AUXILIARY LOAD

Engine corrected gross output includes the power required to drive standard equipment; lube oil, scavenge lube oil, fuel transfer, common rail fuel, separate circuit aftercooler and jacket water pumps. Engine net power available for the external (flywheel) load is calculated by subtracting the sum of auxiliary load from the corrected gross flywheel output power. Typical auxiliary loads are radiator cooling fans, hydraulic pumps, air compressors and battery charging alternators.

ALTITUDE CAPABILITY

Altitude capability is the maximum altitude above sea level at standard temperature and standard pressure at which the engine could develop full rated output power on the current performance data set. Standard temperature values versus altitude could be seen on TM2001.

Engines with ADEM MEUI and HEUI fuel systems operating at conditions above the defined altitude capability derate for atmospheric pressure and temperature conditions outside the values defined, see TM2001. Mechanical governor controlled unit injector engines require a setting change for operation at conditions above the altitude defined on the engine performance sheet. See your Caterpillar technical representative for non standard ratings.

REGULATIONS AND PRODUCT COMPLIANCE

TM1 Emissions information is presented at 'nominal' and 'Potential

Site Variation' values for standard ratings. No tolerances are applied to the emissions data. These values are subject to change at any time. The controlling federal and local emission requirements need to be verified by your Caterpillar technical representative. Log on to the Technology and Solutions Divisions (T&SD) web page (http://tsd.cat.com/etsd/Index.cfm?tech_id=26351CAL) for information including federal regulation applicability and time lines for implementation. Information for labeling and tagging requirements is also provided.

NOTES:

Regulation watch covers regulations in effect and future regulation changes for world, federal, state and local. This page includes items on the watch list where a regulation change or product change might be pending and may need attention of the engine product group. For additional emissions information log on to the TMI web page.

Additional product information for specific market application is available. Customer's may have special emission site requirements that need to be verified by the Caterpillar Product Group engineer.

HEAT REJECTION DEFINITIONS:

Diesel Circuit Type and HHV Balance : DM9500

EMISSIONS DEFINITIONS:

Emissions : DM1176

SOUND DEFINITIONS:

Sound Power : DMB702

Sound Pressure : TM7080

RATING DEFINITIONS:

Agriculture : TM6008

Fire Pump : TM6009

Generator Set : TM6035

Generator (Gas) : TM6041

Industrial Diesel : TM6010

Industrial (Gas) : TM6040

Irrigation : TM5749

Locomotive : TM6037

Marine Auxiliary : TM6036

Marine Prop (Except 3600) : TM5747

Marine Prop (3600 only) : TM5748

MSHA : TM6042

Oil Field (Petroleum) : TM6011

Off-Highway Truck : TM6039

On-Highway Truck : TM6038

Date Released : 11/23/11

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217/785-1705

CONSTRUCTION PERMIT -- NSPS and NESHAP SOURCE -- REVISED

PERMITTEE

KCBX Terminals Company
Brandon Walker
3259 East 100th Street
Chicago, Illinois 60617

Application No.: 07050082

I.D. No.: 031600GSF

Applicant's Designation:

Date Received: September 20, 2012

Subject: Conveyor Addition

Date Issued: December 18, 2012

Date Reissued: December 20, 2012

Location: 10730 South Burley Avenue, Chicago, 60617

Permit is here by granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of the following:

Two (2) Rail Unloaders (RU-~~12~~ and RU-~~23~~);

Truck Unloading (TU-1)

~~Seven (7) Twelve (12) Fixed Conveyors (FC-1, FC-2, FC-3, FC-4, FC-5, FC-6, FC-7, FC-8, FC-9, FC-10, FC-11, and FC-12, and C-13);~~

~~Three (3) Reclaim Conveyors (RC-5, RC-6, and RC-7);~~

~~Twelve (12) Ten (10) Portable Conveyors (PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, PC-10, PC-11, and PC-12);~~

~~Direct Ship Hopper 1 (DSH-1);~~

Portable Feed Hopper (PFH-1);

Portable Feeder (PF-1);

~~Rental Portable Screen (RPS-1);~~

Rental Portable Crusher/Screen (RPCS-1);

~~Two (2) Transfer Points (TP-1 and TP-2);~~

~~Stacker Feed Transfer Point (SFTP-1);~~

~~Four Stacking Conveyors 4 (SC-1, SC-2, SC-3, and SC-4);~~

~~Three (3) Coke Piles (CEP-1, CEP-2, and CEP-3);~~

Two (2) 779 bhp (500 KW) Diesel-Powered Generators (DG-1 and DG-2);

Six (6) 118 HP Diesel-Powered Generators (DG-~~31~~, DG-~~42~~, DG-~~53~~, DG-~~64~~, DG-~~75~~, and DG-~~86~~);

One (1) 400 HP Diesel-Powered Generator (DG-~~97~~);

One (1) 375 HP Diesel-Powered Generator (DG-~~108~~); and

~~One (1) 40 HP Diesel Powered Generator (DG-9);~~

~~Three (3) 300 HP Diesel Generators (DG-10, DG-11, and DG-12); and~~

~~One (1) 20 HP Diesel Powered Water Pump (DWP-1)~~

Bulk Material Storage Piles

PLACEHOLDER FOR STANDARD LANGUAGE REGARDING SMALL EMISSION UNITS, i.e. permit exempt units.

as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

- 1a. This Permit is issued based on the modification of the materials transloading system (to increase the permitted throughput) and the construction of the diesel generators and portable conveyors not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203, Major Stationary Sources Construction and Modification. The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Nitrogen Oxides (NO_x) and Particulate Matter less than 10 microns (PM₁₀) from the above-listed equipment below the levels that would trigger the applicability of these rules.
- b. The Permittee may operate the equipment listed above under this construction permit until the Illinois EPA takes final action on the Permittee's application for a Federally Enforceable State Operating Permit (FESOP) provided that the Permittee timely complies with all the terms of this construction permit. In accordance with the existing operating component of this permit, the Permittee may continue to operate the equipment listed in prior versions of this permit, including the Joint Construction and Operating Permit, issued February 13, 2008, and the revised version issued May 21, 2009, until final action is taken on the aforementioned FESOP application.
- 2a. Diesel-Powered Generators ~~Sets~~ DG-1 through DG-1012 ~~and Diesel-Powered Water Pump DWP-1~~ are subject to the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60 Subparts A and IIII. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 60.4200(a), the provisions of 40 CFR 60 Subpart IIII are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in 40 CFR 60.4200(a)(1) through (4). For the purposes of 40 CFR 60 Subpart IIII, the date that construction commences is the date the engine is ordered by the owner or operator.
 - i. Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines,
 - ii. Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.
 - iii. The provisions of 40 CFR 60.4208 are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005
- b. Pursuant to 40 CFR 60.4201(a), stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-

emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

- c. Pursuant to 40 CFR 60.4204(b), owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in 40 CFR 60.4201 for their 2007 model year and later stationary CI ICE as applicable.
- 3a. Diesel-Powered Generators ~~Sets~~ DG-1 through DG-~~1012~~ and ~~Diesel-Powered Water Pump DWP-1~~ are subject to the National Emission Standards for Hazardous Air pollutants (NESHAP) Stationary Reciprocating Internal Combustion Engines, 40 CFR 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
- b. Pursuant to 40 CFR 63.6590(c)(1), a new or reconstructed stationary ~~residential, commercial, or institutional emergency stationary~~ RICE located at an area source must meet the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines or 40 CFR 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR Part 63.
- 4a. Pursuant to 40 CFR 89.112(a), exhaust emission from nonroad engines to which 40 CFR 89 Subpart B is applicable shall not exceed the applicable exhaust emission standards contained in Table 1, as follows:

Table 1.-Emission Standards (g/kW-hour)

Rated Power (kW)	Tier	Model Year ¹	NO _x	HC	NMHC + NO _x	CO	PM
8 < kW < 19	Tier 1	2000	--	--	9.5	-6.6	0.80
	Tier 2	2005	--	--	7.5	-6.6	0.80
19 < kW < 37	Tier 1	1998	9.2	--	9.5	-6.6	0.80
	Tier 2	2004	--	--	7.5	-5.0	0.60
75 ≤ kW < 130	Tier 1	1997	9.2	--	--	--	--
	Tier 2	2003	--	--	6.6	5.0	0.30
	Tier 3	2007	--	--	4.0	5.0	--
130 ≤ kW < 225	Tier 1	1996	9.2	1.3	--	11.4	0.54
	Tier 2	2003	--	--	6.6	3.5	0.20
	Tier 3	2006	--	--	4.0	3.5	
225 ≤ kW < 450	Tier 1	1996	9.2	1.3	--	11.4	0.54

kW>560	Tier 2	2002	--	--	6.6	3.5	0.20
	Tier 3	2006	--	--	4.0	3.5	
	Tier 1	2000	9.2	1.3	--	11.4	0.54
	Tier 2	2006	--	--	6.4	3.5	0.20

¹ The model years listed indicates the model years for which the specified tier of standards take effect.

- b. Pursuant to 40 CFR 89.112(d), in lieu of the NO_x standards, NMHC + NO_x standards, and PM standards specified in 40 CFR 89.112(a), manufacturers may elect to include engine families in the averaging, banking, and trading program, the provisions of which are specified in 40 CFR 89 Subpart C. The manufacturer must set a family emission limit (FEL) not to exceed the levels contained in Table 2. The FEL established by the manufacturer serves as the standard for that engine family. Table 2 follows:

Table 2.-Upper Limit for Family Emission Limits (g/kW-hour)

Rated Power (kW)	Tier	Model Year ¹	NO _x FEL	NMHC + NO _x FEL	PM FEL
8<kW<19	Tier 1	2000	--	16.0	1.2
	Tier 2	2005	--	-9.5	-0.80
19<kW<37	Tier 1	1999	14.6	16.0	1.2
	Tier 2	2004	--	-9.5	-0.80
75 ≤ kW < 130	Tier 1	1997	14.6	--	1.2
	Tier 2	2003	--	11.5	
	Tier 3	2007	--	6.6	
130<kW<225	Tier 1	1996	14.6	--	--
	Tier 2	2003	--	10.5	0.54
	Tier 3	2006	--	6.6	
225<kW<450	Tier 1	1996	14.6	--	--
	Tier 2	2001	--	10.5	0.54
	Tier 3	2006	--	6.4	
kW>560	Tier 1	2000	14.6	--	--
	Tier 2	2006	--	10.5	0.54

¹ The model years listed indicates the model years for which the specified tier of standards take effect.

- c. Pursuant to 40 CFR 89.112(e), naturally aspirated nonroad engines to which 40 CFR 89 Subpart B is applicable shall not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision applies to all Tier 2 engines and later models. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction.

- d. Pursuant to 40 CFR 89.113(a), exhaust opacity from compression-ignition nonroad engines for which 40 CFR 89 Subpart B is applicable must not exceed:
- i. 20 percent during the acceleration mode;
 - ii. 15 percent during the lugging mode; and
 - iii. 50 percent during the peaks in either the acceleration or lugging modes.
- 5a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
- d. Pursuant to 35 Ill. Adm. Code 212.316(b), no person shall cause or allow fugitive particulate matter emissions generated by the crushing or screening of slag, stone, coke or coal to exceed an opacity of 10 percent.
- e. Pursuant to 35 Ill. Adm. Code 212.316(f), unless an emission unit has been assigned a particulate matter, PM_{10} , or fugitive particulate matter emissions limitation elsewhere in 35 Ill. Adm. Code 212.316 or in 35 Ill. Adm. Code 212 Subparts R or S, no person shall cause or allow fugitive particulate matter emissions from any emission unit to exceed an opacity of 20 percent.
- f. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or

after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

- g. Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM₁₀ from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.
- h. Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart UU (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM₁₀ of at least fifteen (15) tons per year.
- 6a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hour), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hour of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- b. Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm.
- c. Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable 35 Ill. Adm. Code 214 Subparts B through F (i.e., 35 Ill. Adm. Code 214.122).
- 7. This permit is issued based on the conveyors, crushers, and screens at this source not being subject to the New Source Performance Standards (NSPS) for Coal Preparation Plants, 40 CFR 60 Subpart Y, because no machinery at this source facility is used to reduce the size of coal or to separate coal from refuse.
- 8a. ~~Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.~~
- b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive

particulate matter; however, if a stack test is performed, this subsection is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

- 9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in Appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
- c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 10a. Pursuant to 40 CFR 60.4206, owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.
- b. Pursuant to 40 CFR 60.4207(a), beginning October 1, 2007, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
- c. Pursuant to 40 CFR 60.4207(b), beginning October 1, 2010, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
- d. Pursuant to 40 CFR 60.4211(a), if you are an owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written

instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

- e. Pursuant to 40 CFR 60.4211(c), if you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(b) or 40 CFR 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to 40 CFR 60 Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g).
- f. Pursuant to 40 CFR 60.4211(e)(1), if you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(e) or 40 CFR 60.4205(f), you must demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(e)(1) or (2). Purchasing, or otherwise owning or operating, an engine certified to the emission standards in 40 CFR 60.4204(e) or 40 CFR 60.4205(f), as applicable.
- 11a. Pursuant to 40 CFR 80.510(b), beginning June 1, 2010. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NR and LM diesel fuel is subject to the following per-gallon standards:
 - i. Sulfur content 15 ppm maximum for NR diesel fuel.
 - ii. Cetane index or aromatic content, as follows:
 - A. A minimum cetane index of 40; or
 - B. A maximum aromatic content of 35 volume percent.
- 12a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in this 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324 shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:
 - i. Visual inspections of air pollution control equipment;
 - ii. Maintenance of an adequate inventory of spare parts; and

- iii. Expeditious repairs, unless the emission unit is shutdown.
- b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code 212 Subpart UU shall prepare contingency measure plans reflecting the PM₁₀ emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code 212 Subpart UU after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code 212 Subpart UU or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code 212 Subpart UU and shall not relieve the source of its obligation to timely submit a contingency measure plan.
- c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code 212 Subpart UU shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:
 - i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM₁₀ subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.
 - ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM₁₀ subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.
- d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code 212 Subpart UU through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM₁₀ not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.
- e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM₁₀ as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the

source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedences leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

- f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:
 - i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3 .
 - ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3 .
- 13a. Pollution control devices associated with the emission units being modified under this permit shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.
- b. The transloading facility shall be operated in accordance with good operating practices to minimize particulate matter emissions including the following.
 - i. Enclosures shall be maintained in good condition and wet suppressant shall be applied as needed whenever materials are being moved past a point of application; and
 - ii. Remedial actions shall be taken if visible emissions are observed beyond the property line.
- c. This permit is issue based on the handling of only coal, petroleum coke, and like materials, and salt at the plant. The handling of any other material at the source requires that the Permittee first obtain a construction permit from the Illinois EPA.
- d. The ~~water pump and the generators sets~~ shall only be operated with distillate fuel oil as the fuel. The use of any other fuel in the ~~water pump or the generators sets~~ requires that the Permittee first

obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

- e. The Permittee shall not keep, store, or use distillate fuel oil (Grades No. 1 and 2) at this source with a sulfur content greater than the larger of the following values:
 - i. 0.28 weight percent, or
 - ii. The Wt. percent given by the formula: Maximum Wt. percent sulfur = (0.000015) x (Gross heating value of oil, Btu/lb).
- f. Organic liquid by-products or waste materials shall not be used in the diesel generators ~~sets~~ without written approval from the Illinois EPA.
- g. The Illinois EPA shall be allowed to sample fuel stored at the source associated with the diesel generators ~~s-set~~.
- 14a. The total amount of materials handled through the transloading facility shall not exceed 1.13 million tons/month and 11.25 million tons/year.
 - b. Materials handled by truck shall not exceed 175,000 tons/month and 1,750,000 tons per year (includes coal inbound/outbound via truck ~~and salt outbound via truck~~).
 - c. Emissions and operation of the transloading facility shall not exceed the following limits:
 - i. Material Storage Piles and Transfer and Conveying, and Loadout:

Process	Material Throughput		PM Emissions			PM ₁₀ Emissions		
	(Ton/Mo)	(Ton/Yr)	(lb/Ton)	(T/Mo)	(T/Yr)	(lb/Ton)	(T/Mo)	(T/Yr)
Coal & Coke*	1,100,000	11,000,000	0.00064	12.21	102.08	0.0003	4.79	47.85
Salt	25,000	250,000	0.00064	-0.27	-2.87	0.0003	0.13	1.28
Incidental Soil Crushing*	30,660	306,600	0.0033	0.03	0.25	0.00101	0.01	0.08
Incidental Soil Screening*	30,660	306,600	0.00067	0.01	0.05	0.00034	0.01	0.03
				Totals 105.25				49.24

* 50 % control for wet suppression

- ii. These limits are based on the maximum materials throughput of 11.25 million tons per year with at most 1,750,000 tons/year handled by trucks, and standard emission factors (Table 13.2.4, AP 42, Fifth Edition, Volume I, November 2006 with U = 16.4 and M = 18.3).
- iii. The above limitations contain revisions to previously issued Permits 03100038 and 06040012. The source has requested that the Illinois EPA establish conditions in this permit that allow

various refinements from the conditions of the aforementioned permit. The source has requested these revisions and has addressed the applicability and compliance of Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203, Major Stationary Sources Construction and Modification. These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the construction permit application contains the most current and accurate information for the source. Specifically, the source's permitted annual throughput is being increase from 11.0 million tons per year to 11.25 million tons per year and the permitted emissions of PM₁₀ are being increases from 12.5 tons per year to 49.24 tons per year.

- ~~d. Emissions and operation of the 15 kW (20 HP) Diesel Powered Water Pump (DWP-1) shall not exceed the following:~~
 - ~~i. The diesel powered water pump runtime shall not exceed 150 hours/month and 500 hours/year.~~
 - ~~ii. Emissions from the diesel powered water pump shall not exceed:~~

<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>		
	<u>Factor</u>	<u>(lb/HP-Hour)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Carbon Monoxide (CO)	—0.01079	0.02	0.05	0.05
Nitrogen Oxides (NO_x)	0.015	0.03	0.08	0.08
Particulate Matter (PM)	—0.0013	0.01	0.01	0.01
Particulate Matter-10 (PM₁₀)	—0.0013	0.01	0.01	0.01
Sulfur Dioxide (SO₂)	**	0.01	0.01	0.01
Volatile Organic Material (VOM)	—0.00062	0.01	0.01	0.01

~~These limits are based on the emission factors for units with power rating of less than 600 HP, and the emission factors for CO, NO_x, VOM, and PM are based on the allowable rates in 40 CFR 89.112(a), table 1. Emission totals shall be calculated by multiplying the diesel generator set runtime and the emission factors for each pollutant.~~

~~** SO₂ emissions calculated using 40 CFR 60.4207(a), maximum sulfur content of 0.05% per gallon of fuel and a fuel consumption rate of 10 gallons of diesel fuel per hour per engine.~~

~~500 hour/year x 10 gallons/hour x 7.1 lbs/gallon x 0.05% S / 2,000 lbs/gallon = 0.01 tpy~~

~~e. Emissions and operation of the 30 kW (40 HP) Diesel Powered Generator (DG-9) shall not exceed the following:~~

- ~~i. The diesel-powered generator runtime shall not exceed 350 hours/month and 3,500 hours/year.~~
- ~~ii. Emissions from the diesel-powered generator shall not exceed:~~

<u>Pollutant</u>	<u>Emission Factor (lb/HP-Hour)</u>	<u>Emissions (Tons/Month)</u>	<u>Emissions (Tons/Year)</u>
Carbon Monoxide (CO)	0.00903	0.06	0.63
Nitrogen Oxides (NO_x)	0.015	0.11	1.05
Particulate Matter (PM)	0.001	0.01	0.07
Particulate Matter-10 (PM₁₀)	0.001	0.01	0.07
Sulfur Dioxide (SO₂)	**	0.01	0.06
Volatile Organic Material (VOM)	0.00062	0.01	0.04

~~These limits are based on the emission factors for units with power rating of less than 600 HP, and the emission factors for CO, NO_x, VOM, and PM are based on the allowable rates in 40 CFR 89.112(a), table 1. Emission totals shall be calculated by multiplying the diesel generator set runtime and the emission factors for each pollutant.~~

~~** SO₂ emissions calculated using 40 CFR 60.4207(a), maximum sulfur content of 0.05% per gallon of fuel and a fuel consumption rate of 10 gallons of diesel fuel per hour per engine.~~

$$\frac{3,500 \text{ hours/year} \times 10 \text{ gallons/hour} \times 7.1 \text{ lbs/gallon} \times 0.05\% \text{ S}}{2,000 \text{ lbs/gallon}} = 0.06 \text{ tpy}$$

d.f. Emissions and operation of the six 88 kW (118 HP) Diesel-Powered Generators (DG-31, DG-42, DG-35, DG-64, DG-57, and DG-86) combined will not exceed the following:

- i. The diesel-powered generators runtime shall not exceed 2,100 hours/month and 21,000 hours/year.
- ii. Emissions from the six diesel-powered generators combined shall not exceed:

<u>Pollutant</u>	<u>Emission Factor (lb/HP-Hour)</u>	<u>Emissions (Tons/Month)</u>	<u>Emissions (Tons/Year)</u>
Carbon Monoxide (CO)	0.00815	1.01	10.10
Nitrogen Oxides (NO _x)	0.015	1.86	18.59
Particulate Matter (PM)	0.0005	0.06	0.62
Particulate Matter-10 (PM ₁₀)	0.0005	0.06	0.62

Sulfur Dioxide (SO ₂)	**	0.04	0.37
Volatile Organic Material (VOM)	0.00033	0.04	0.41

These limits are based on the emission factors for units with power rating of less than 600 HP, and the emission factors for CO, NO_x, VOM, and PM are based on the allowable rates in 40 CFR 89.112(a), table 1. Emission totals shall be calculated by multiplying the diesel generator set runtime and the emission factors for each pollutant.

** SO₂ emissions calculated using 40 CFR 60.4207(a), maximum sulfur content of 0.05% per gallon of fuel and a fuel consumption rate of 10 gallons of diesel fuel per hour per engine.

$$21,000 \text{ hour/year} \times 10 \text{ gallons/hour} \times 7.1 \text{ lbs/gallon} \times 0.05\% \text{ S} / 2,000 \text{ lbs/gallon} = 0.37 \text{ tpy}$$

~~g. Emissions and operation of the three 224 kW (300 HP) Diesel Powered Generators (DG-10, DG-11, and DG-12) combined shall not exceed the following:~~

~~i. The diesel powered generators runtime shall not exceed 1,050 hours/month and 10,500 hours/year.~~

~~ii. Emissions from the three diesel powered generators combined shall not exceed:~~

<u>Pollutant</u>	<u>Emission Factor (lb/HP Hour)</u>	<u>Emissions (Tons/Month)</u>	<u>Emissions (Tons/Year)</u>
Carbon Monoxide (CO)	0.00573	0.90	9.02
Nitrogen Oxides (NO_x)	0.015	2.36	23.63
Particulate Matter (PM)	0.0003	0.05	0.47
Particulate Matter 10 (PM₁₀)	0.0003	0.05	0.47
Sulfur Dioxide (SO₂)	**	0.02	0.19
Volatile Organic Material (VOM)	0.00033	0.05	0.52

~~These limits are based on the emission factors for units with power rating of less than 600 HP, and the emission factors for CO, NO_x, VOM, and PM are based on the allowable rates in 40 CFR 89.112(a), table 1. Emission totals shall be calculated by multiplying the diesel generator set runtime and the emission factors for each pollutant.~~

~~** SO₂ emissions calculated using 40 CFR 60.4207(a), maximum sulfur content of 0.05% per gallon of fuel and a fuel consumption rate of 10 gallons of diesel fuel per hour per engine.~~

~~10,500 hour/year x 10 gallons/hour x 7.1 lbs/gallon x 0.05% S /
2,000 lbs/gallon = 0.19 tpy~~

eh. Emissions and operation of the 280 kW (375 HP) Diesel-Powered Generator (DG-~~810~~) shall not exceed the following:

- i. The diesel-powered generator runtime shall not exceed 350 hours/month and 3,500 hours/year.
- ii. Emissions from the diesel-powered generator shall not exceed:

<u>Pollutant</u>	<u>Emission Factor</u> (lb/HP-Hour)	<u>Emissions</u>	
		(Tons/Month)	(Tons/Year)
Carbon Monoxide (CO)	0.00573	0.38	3.76
Nitrogen Oxides (NO _x)	0.015	0.98	9.84
Particulate Matter (PM)	0.0003	0.02	0.20
Particulate Matter-10 (PM ₁₀)	0.0003	0.02	0.20
Sulfur Dioxide (SO ₂)	**	0.01	0.06
Volatile Organic Material (VOM)	0.00033	0.02	0.22

These limits are based on the emission factors for units with power rating of less than 600 HP, and the emission factors for CO, NO_x, VOM, and PM are based on the allowable rates in 40 CFR 89.112(a), table 1. Emission totals shall be calculated by multiplying the diesel generator set runtime and the emission factors for each pollutant.

** SO₂ emissions calculated using 40 CFR 60.4207(a), maximum sulfur content of 0.05% per gallon of fuel and a fuel consumption rate of 10 gallons of diesel fuel per hour per engine.

3,500 hours/year x 10 gallons/hour x 7.1 lbs/gallon x 0.05% S /
2,000 lbs/gallon = 0.06 tpy

fi. Emissions and operation of the 298 kW (400 HP) Diesel-Powered Generator (DG-~~97~~) shall not exceed the following:

- i. The diesel-powered generator runtime shall not exceed 350 hours/month and 3,500 hours/year.
- ii. Emissions from the diesel-powered generator shall not exceed:

<u>Pollutant</u>	<u>Emission Factor</u> (lb/HP-Hour)	<u>Emissions</u>	
		(Tons/Month)	(Tons/Year)
Carbon Monoxide (CO)	0.00573	0.40	4.01
Nitrogen Oxides (NO _x)	0.015	1.05	10.50
Particulate Matter (PM)	0.0003	0.02	0.21
Particulate Matter-10 (PM ₁₀)	0.0003	0.02	0.21

Sulfur Dioxide (SO ₂)	**	0.01	0.06
Volatile Organic Material (VOM)	0.000033	0.02	0.23

These limits are based on the emission factors for units with power rating less than 600 HP, and the emission factors for CO, NO_x, VOM, and PM are based on the allowable rates in 40 CFR 89.112(a), table 1. Emission totals shall be calculated by multiplying the diesel generator set runtime and the emission factors for each pollutant.

** SO₂ emissions calculated using 40 CFR 60.4207(a), maximum sulfur content of 0.05% per gallon of fuel and a fuel consumption rate of 10 gallons of diesel fuel per hour per engine.

$3,500 \text{ hour/year} \times 10 \text{ gallons/hour} \times 7.1 \text{ lbs/gallon} \times 0.05\% \text{ S} / 2,000 \text{ lbs/gallon} = 0.06 \text{ tpy}$

- g. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).
15. This permit is issued based on the potential to emit (PTE) for Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements of Section 112(g) of the Clean Air Act.
16. This permit is issued based on Diesel-Powered Generators ~~Sets-DG-1 through DG-1012 and Diesel-Powered Water Pump DWP-1~~ each having a displacement of less than 30 liters per cylinder and have been certified by the manufacturer, as required by 40 CFR 60.4211(c), to meet the standards of 40 CFR 60.4204(b) or 60.4205(b). As a result, this permit is issued based on the Diesel-Powered Generators ~~Sets-DG-1 through DG-102 and Diesel-Powered Water Pump DWP-1~~ not being subject to the testing requirements of 40 CFR 60.8.
- 17a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing

methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

- ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
 - b. Testing required by Condition 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
18. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 19a. Pursuant to 40 CFR 60.4209(a), if you are an owner or operator, you must meet the monitoring requirements of 40 CFR 60.4209. In addition, you must also meet the monitoring requirements specified in 40 CFR 60.4211. If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.
- b. Pursuant to 40 CFR 60.4209(b), If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
- 20a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

- b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

- 21. Pursuant to 40 CFR 60.4214(c), if the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

- 22a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
 - b. i. Pursuant to 35 Ill. Adm. Code 212.316(g)(1), the owner or operator of any fugitive particulate matter emission unit subject to 35 Ill. Adm. Code 212.316 shall keep written records of the application of control measures as may be needed for compliance with the opacity limitations of 35 Ill. Adm. Code 212.316 and shall submit to the Illinois EPA an annual report containing a summary of such information.

 - ii. Pursuant to 35 Ill. Adm. Code 212.316(g)(2), the records required under 35 Ill. Adm. Code 212.316(g) shall include at least the following:
 - A. The name and address of the source;

 - B. The name and address of the owner and/or operator of the source;

 - C. A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;

 - D. For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent and, if diluted, percent of concentration, used each day; and

 - E. A log recording incidents when control measures were not used and a statement of explanation.

- iii. Pursuant to 35 Ill. Adm. Code 212.316(g)(3), the records required under 35 Ill. Adm. Code 212.316 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- iv. Pursuant to 35 Ill. Adm. Code 212.316(g)(4), the records required under 35 Ill. Adm. Code 212.316(g) shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- c.
 - i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).
 - ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.
 - iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.
 - iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- 23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. Records addressing use of good operating practices for the dust suppression systems associated with the materials transloading system:
 - A. Records for periodic inspection of the dust suppression systems with date, individual performing the inspection, and nature of inspection; and
 - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - ii. Name and total amount of each material shipped (tons/month and tons/year);

- iii. Name and amount of each material shipped by truck (tons/month and tons/year);
 - iv. Amount of each material that is deposited on storage piles (tons/month and tons/year);
 - v. Diesel generators ~~sets~~ runtime (hours/month and hours/year);
 - vi. Delivery ticket~~Certification~~ from the fuel supplier showing delivery of ultra low sulfur diesel fuel and sulfur content for ~~of weight percent sulfur content of each fuel shipments~~ received;
 - ~~vii. Amount of fuel used (gallons/month and gallons/year);~~
 - viii. An inspection, maintenance and repair log of the generators listing each activity performed with date; and
 - viii. Monthly and annual emissions of NO_x, CO, SO₂, PM, PM₁₀ and VOM from the source with supporting calculations (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 24a. Pursuant to 40 CFR 60.7(a), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:
- i. A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
 - ii. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
 - iii. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include

information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

- 25a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(4), copies of all records required by 35 Ill. Adm. Code 212.324 shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA.
- ii. Pursuant to 35 Ill. Adm. Code 212.316(g)(5), a quarterly report shall be submitted to the Illinois EPA stating the following: the dates any necessary control measures were not implemented, a listing of those control measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements of 35 Ill. Adm. Code 212.316. This report shall be submitted to the Illinois EPA thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31.
- iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.
- 26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

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b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

| It shall be noted that this permit was revised to add correct emission units and revise the emission limits in Condition 14(c). ~~four portable conveyors to the list of emission units and to increase the emissions limits in Condition 14(e).~~

If you have any questions on this, please call Mike Dragovich at 217/785-1705.

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:MJD:psj

cc: Region 1

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Illinois Environmental Protection Agency

Kath D. Hodge

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