ILLINOIS POLLUTION CONTROL BOARD August 20, 2009

IN THE MATTER OF:)	
)	
NITROGEN OXIDES EMISSIONS FROM)	R08-19
VARIOUS SOURCE CATEGORIES:)	(Rulemaking - Air)
AMENDMENTS TO 35 ILL. ADM. CODE)	
PARTS 211 AND 217)	

Adopted Rule. Final Notice.

OPINION AND ORDER OF THE BOARD (by A.S. Moore):

Today the Board adopts its final order in this rulemaking amending Parts 211 and 217 of its air pollution regulations and addressing emissions of nitrogen oxides (NO_x).

On May 9, 2008, the Illinois Environmental Protection Agency (Agency or Illinois EPA or IEPA) filed a proposal under the general rulemaking provisions of Sections 27 and 28 of the Environmental Protection Act (Act) (415 ILCS 5/27, 28 (2008)). On both January 30, 2009, and March 23, 2009, the Agency filed motions to amend the proposal, both of which the Board granted. On April 2, 2009, the Board granted the Agency's motion for expedited review of this proposal.

After conducting three public hearings, the Board on May 7, 2009, adopted its first-notice opinion and order in this proceeding. *See* 33 Ill. Reg. 6896, 6921 (May 22, 2009). In that opinion and order, the Board largely adopted the Agency's proposal, including changes proposed in the two motions to amend. At its meeting on August 18, 2009, the Joint Committee on Administrative Rules (JCAR) considered the Board's second notice proposal and issued its Certificate of No Objection to the proposed rules. JCAR has proposed technical changes, which the Board incorporates in its final rules.

Generally, the adopted rules amend Parts 211 and 217 of the Board's air pollution regulations (35 Ill. Adm. Code 211, 217) to control NO_x emissions from major stationary sources in the nonattainment areas and from emission units including industrial boilers, process heaters, glass melting furnaces, cement kilns, lime kilns, furnaces used in steelmaking and aluminum melting, and fossil fuel-fired stationary boilers at such sources.

In this opinion, the Board first provides the procedural history of this rulemaking and background on regulation of NO_x emissions. The Board then addresses technical and economic consideration before reaching its conclusion. Finally, the Board's order directs the Clerk to file the adopted amendments with the Secretary of State for publication in the *Illinois Register*.

PROCEDURAL HISTORY

On May 9, 2008, the Agency filed a rulemaking proposal under the general rulemaking provisions of Sections 27 and 28 of the Act. 415 ILCS 5/27, 28 (2008). A Statement of Reasons (Statement) and a Technical Support Document accompanied the proposal. A motion for waiver of copy requirements also accompanied the proposal. In an order dated June 5, 2008, the Board accepted the Agency's proposal for hearing and granted the Agency's motion for waiver.

In a letter dated June 6, 2008, the Board requested that the Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study (EcIS) of the Agency's rulemaking proposal. *See* 415 ILCS 5/27(b) (2008). DCEO has not responded to the Board's request.

In an order dated June 12, 2008, the hearing officer scheduled a first hearing to begin on October 14, 2008, in Springfield and a second hearing to begin December 9, 2008, in Chicago. The order directed participants wishing to testify at the first hearing to pre-file their testimony no later than September 2, 2008. The order also directed participants to pre-file questions based on the Agency's pre-filed testimony no later than September 16, 2008. Finally, the order directed the Agency to pre-file written answers to those pre-filed questions no later than September 30, 2008.

On August 29, 2008, the Agency pre-filed testimony by Mr. Robert Kaleel, Mr. Vir Gupta, and James E. Staudt, Ph.D.

On September 15, 2008, Midwest Generation filed questions for the Agency's witnesses. On September 16, 2008, ExxonMobil Oil Corporation (ExxonMobil) filed questions for the Agency's witnesses. Also on September 16, 2008, the Illinois Environmental Regulatory Group (IERG) filed questions for the Agency's witnesses. On September 30, 2008, the Agency filed three documents: answers to questions submitted by Midwest Generation (MG Answers); answers to questions submitted by ExxonMobil; and answers to questions submitted by IERG.

The first hearing took place as scheduled on October 14, 2008, in Springfield. At the first hearing, the hearing officer admitted into the record four exhibits:

Finding of Failure to Submit State Implementation Plans Required for the 1997 8-Hour Ozone NAAQS, 73 Fed. Reg. 15416-21 (Mar. 24, 2008) (Exh. 1);

[Illinois Environmental Protection] Agency Analysis of Economic and Budgetary Effects of Proposed Rulemaking (35 Ill. Adm. Code 211) (Exh. 2);

[Illinois Environmental Protection] Agency Analysis of Economic and Budgetary Effects of Proposed Rulemaking (35 Ill. Adm. Code 217) (Exh. 3); and

Cleaver Brooks letter dated May 19, 2006, to New Hampshire Division of Environmental Services (Exh. 4).

On October 24, 2008, the Board received the transcript of the first hearing.

On November 5, 2008, the Agency filed its responses to questions raised at the first hearing (PC 1).

On November 25, 2008, the Board received pre-filed testimony for the December 9, 2008, hearing from Mr. Scott Miller and Mr. Kent Wanninger on behalf of Midwest Generation, from Ms. Deirdre K. Hirner and Mr. David J. Kolaz on behalf of IERG, from Mr. Larry G. Siebenberger and Mr. Blake E. Stapper on behalf of U.S. Steel, and from Mr. David W. Dunn on behalf of ConocoPhillips. Also on November 25, 2008, the Board received pre-filed comments submitted by ArcelorMittal. In addition, on November 25, 2008, the Board received post-hearing comments relating to the October 14, 2008 hearing from Saint-Gobain Containers, Inc. (Saint-Gobain) (PC 2).

The second hearing took place as scheduled on December 9 and 10, 2008, in Chicago. No one presented testimony concerning DCEO's decision not to conduct an EcIS. *See* 415 ILCS 5/27(a) (2008); Tr.3 at 96-97. Over the two days of the second hearing, the hearing officer admitted into the record fourteen exhibits:

Pre-Filed Testimony of Deirdre K. Hirner on Behalf of the Illinois Environmental Regulatory Group (Exh. 5);

Pre-Filed Testimony of David J. Kolaz on Behalf of the Illinois Environmental Regulatory Group (Exh. 6);

from Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard; Final Rule, 70 Fed. Reg. 71657 (Nov. 29, 2005) (Exh. 7);

Summary of NO_x Budget Allocations and Usage 2004-2007 (Exh. 8);

Pre-Filed Testimony of David W. Dunn on Behalf of ConocoPhillips Company (Exh. 9);

Pre-Filed Testimony of Larry G. Siebenberger on Behalf of United States Steel Corporation (Exh. 10);

Pre-Filed Testimony of Blake E. Stapper on Behalf of United States Steel Corporation (Exh. 11);

Testimony of Scott Miller of Behalf of Midwest Generation (Exh. 12);

Testimony of Kent Wanninger on Behalf of Midwest Generation (Exh. 13);

IHS-CERA Power Capital Costs Index (PCCI) (Graph Included on Page 7 of Kent Wanninger's Testimony on Behalf of Midwest Generation) (Exh. 14);

Baldwin 3 graph (Exh. 15);

Joliet 71 boiler graph (Exh. 16);

Bureau of Labor Statistics Producer Price Index. Commodities Group: Metals and metal products Item: Hot rolled bars, plates, and structural shapes (December 4, 2008) (Exh. 17); and

Bureau of Labor Statistics Producer Price Index. Commodities Group: Metals and metal products Item: Carbon scrap steel (Dec. 4, 2008) (Exh. 18).

On December 30, 2008, the Board received the transcript of December 10, 2008, the second day of the second hearing (Tr.3). On January 5, 2009, the Board received the transcript of December 9, 2008, the first day of the second hearing.

In an order dated December 23, 2008, the hearing officer scheduled a third hearing for February 3, 2009, in Edwardsville and directed participants wishing to testify at the third hearing to pre-file testimony no later than January 20, 2009.

On January 20, 2009, the Board received post-hearing comments from IERG (PC 3), Saint-Gobain (PC 4), and ConocoPhillips (PC 5). Also on January 20, 2009, the Board received pre-filed testimony on behalf of the Agency from Mr. Robert Kaleel (Kaleel Pre-filed Test. 2), Mr. Michael Koerber, and James E. Staudt, Ph.D. Also on January 20, 2009, the Agency filed a motion to correct the transcript of the second hearing.

On January 30, 2009, the Agency filed a motion to amend its rulemaking proposal.

On January 30, 2009, the Board received supporting materials from U.S. Steel. (PC 6). On February 2, 2009, the Board received pre-filed testimony of Mr. Blake E. Stapper on behalf of U.S. Steel. On February 3, 2009, the Board received a public comment from Mr. James L. Kavanaugh of the Missouri Department of Natural Resources (PC 7).

The third hearing took place as scheduled on February 3, 2009, in Edwardsville. No one presented testimony concerning DCEO's decision not to conduct an EcIS. *See* 415 ILCS 5/27(a) (2008). During the third hearing, the hearing officer admitted into the record seven exhibits:

Western Michigan Ozone Study: Draft Report (January 21, 2009) (Exh. 19);

Calculation of Available COG after Consumption in Reheat Furnaces (Exh. 20);

Calculation of Siebenberger Exhibit A Information — COG burned in reheat furnaces per Siebenberger December testimony (Exh. 21);

Total Boiler COG Usage from Attachment C (Exh. 22);

Calculation of Siebenberger Exhibit A Information — with 2008 COG rate, 35 day scrubber maint. (Exh. 23);

Calculation of Siebenberger Exhibit A Information — with 2008 COG rate, no COG scrubber maint. (Exh. 24); and

Pre-Filed Testimony of Blake E. Stapper on Behalf of United States Steel Corporation (Exh. 25).

On February 11, 2009, the Board received the transcript of the third hearing.

In an order dated February 19, 2009, the Board granted the Agency's motion to amend its rulemaking proposal and also granted the Agency's motion to correct the transcript of the second hearing.

On March 19, 2009, the Agency filed a motion for expedited review. Also on March 19, 2009, the Agency forwarded to the Board's Acting Chairman, Dr. G. Tanner Girard, a letter from the United States Environmental Protection Agency (USEPA) (PC 8). On March 20, 2009, the Board received Midwest Generation's response to the Agency's motion for expedited review. On March 23, 2009, the Board received from Agency Director Douglas P. Scott a letter regarding expedited review of the Agency's amended proposal. On March 26, 2009, the Board received IERG's response to the Agency's motion for expedited review. In an order dated April 2, 2009, the Board granted the Agency's motion for expedited review.

On March 23, 2009, the Board received post-hearing comments from Midwest Generation (PC 9), ArcelorMittal (PC 10), U.S. Steel (PC 12), IERG (PC 13), and ConocoPhillips (PC 14). Also on March 23, 2009, the Board received post-hearing comments from the Agency (PC 11), accompanied by the Agency's second motion to amend its rulemaking proposal.

On May 7, 2009, the Board issued its first notice opinion and order. *See* 33 Ill. Reg. 6896, 6921 (May 22, 2009). Among other action, that opinion granted the Agency's second motion to amend its rulemaking proposal.

On July 1, 2009, the Board received a comment submitted by ArcelorMittal (PC 15). On July 6, 2009, the Board received comments submitted by IERG (PC 16), the Agency (PC 17), ConocoPhillips (PC 18), and U.S. Steel (PC 19). On July 7, 2009, ArcelorMittal filed a motion for leave to file a response to the Agency's first notice comment, accompanied by its response (PC 20). On July 8, 2009 the Board received comments submitted by the U.S. Department of Energy and the Argonne National Laboratory (PC 21). On July 15, 2009, the Agency filed a motion for leave to file *instanter* a response to the first notice comments of U.S. Steel and ArcelorMittal, accompanied by its response to those comments (PC 22).

On July 23, 2009, the Board adopted its second notice opinion and order. At its meeting on August 18, 2009, JCAR considered the Board's second notice proposal and issued its Certificate of No Objection to the proposed rules. JCAR has proposed technical changes, which the Board incorporates in its final rules.

BACKGROUND ON REGULATION OF NO_x EMISSIONS

6

 NO_x is one of the primary precursors to the formation of ozone and is also a precursor to the formation of $PM_{2.5}$. Statement at 2, 3.

The Agency reports that, "[o]n July 18, 1997, USEPA revised the NAAQS [National Ambient Air Quality Standard] for ozone by replacing the 1-hour standard with an 8-hour standard." Statement at 3, citing 62 Fed. Reg. 38856 (July 18, 1997). Illinois includes two areas designated as nonattainment for the 8-hour ozone standard. Statement at 3. The Chicago nonattainment area includes Cook, DuPage, Kane, Lake, McHenry, and Will Counties, Goose Lake and Aux Sable Townships in Grundy County, and Oswego Township in Kendall County. *Id.* The Metro East nonattainment area includes Jersey, Madison, Monroe, and St. Clair Counties. *Id.* at 3, 5.

The Agency also reports that, "[o]n July 18, 1997, USEPA revised the NAAQS for particulate matter to add new standards for fine particles, using PM_{2.5} as the indicator, and established primary annual and 24-hour standards for PM_{2.5}." Statement at 4, citing 62 Fed. Reg. 38652 (July 18, 1997). The Agency states that USEPA has recently strengthened the 24-hour standard. Statement at 4, citing 71 Fed. Reg. 61144 (Oct. 17, 2006). Illinois includes two areas designated nonattainment for the PM_{2.5} standard. Statement at 4. The Chicago nonattainment area includes Cook, DuPage, Kane, Lake, McHenry, and Will Counties, Goose Lake and Aux Sable Townships in Grundy County, and Oswego Township in Kendall County. *Id.* at 4-5. The Metro East nonattainment area includes Madison, Monroe, and St. Clair Counties and Baldwin Township in Randolph County. *Id.* at 5, citing 40 C.F.R. § 81.314.

The Agency states that Section 110 of the Clean Air Act (CAA) and other related provisions require states to submit for USEPA approval State Implementation Plans (SIP) "that provide for the attainment and maintenance of standards established by USEPA through control programs directed to sources of the pollutants involved." Statement at 2, citing 42 U.S.C. § 7410. The Agency further states that "[t]he CAA also provides for the State to address emissions sources on an area-specific basis through such requirements as reasonably available control measures ("RACM") and reasonable available control technology ("RACT")." Statement at 2, citing 42 U.S.C §§ 7502, 7511a. Specifically, the CAA requires Illinois for each nonattainment area "to demonstrate that it has adopted 'all reasonably available control measures as expeditiously as possible (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonable available control technology) and shall provide for attainment of the national primary ambient air quality standards." Statement at 2, 5, citing 42 U.S.C. § 7502(c)(1).

The Agency characterizes RACT as "[a] subset of RACM." Statement at 6, citing 44 Fed. Reg. 53762 (Sept. 17, 1979). The Agency defines RACT as "the lowest emission limitation that a particular source can meet by applying a control technique that is reasonably available considering technological and economic feasibility." Statement at 6, citing 44 Fed. Reg. 53762 (Sept. 17, 1979). The Agency states that "Section 182(b)(2) of the CAA requires states to adopt RACT rules for all areas designated nonattainment for ozone and classified as moderate or

-

 $^{^{1}}$ "PM $_{2.5}$ refers to particulate matter that is 2.5 micrometers or smaller in size." Statement at 4.

above." Statement at 6-7, citing 42 U.S.C. \S 7511a(b)(2). The Agency further states that Section 182(f) of the CAA requires each state in which all or part of a moderate nonattainment area is located to adopt RACT for major NO_x sources. Statement at 7, citing 42 U.S.C. \S 7511a(f). The Agency notes that "Section 302 of the CAA defines 'major stationary source' as any stationary facility or source of air pollutants that directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant." Statement at 7, citing 42 U.S.C. \S 7602.

The Agency argues that these authorities "establish the requirements for Illinois to submit NO_x RACT regulations for all major stationary sources of NO_x in $PM_{2.5}$ nonattainment areas and ozone nonattainment areas classified as moderate and above." Statement at 7, citing 72 Fed. Reg. 20586 (Apr. 25, 2007); 70 Fed. Reg. 71612 (Nov. 29, 2005). The Agency further argues that, because Illinois includes nonattainment areas classified as moderate and above for the 8-hour ozone NAAQS, it was "required to submit by September 15, 2006, a SIP demonstrating that sources specified under the CAA were subject to RACT requirements." Statement at 7-8, citing 70 Fed. Reg. 71612 (Nov. 29, 2005). The Agency claims that, "[o]n March 24, 2008, USEPA made a finding that Illinois, among other states, failed to make a RACT submittal required under Part D of Title I of the CAA for its two moderate nonattainment areas." Statement at 8, citing 73 Fed. Reg. 15416 (Mar. 24, 2008). The Agency notes that "[s]uch finding starts the 18-month emission offset sanctions clock and 24-month highway funding sanctions clock under Section 179(a) and (b) of the CAA and the 24-month clock for the promulgation by USEPA of a Federal Implementation Plan under Section 110(c) of the CAA". Statement at 8, citing 42 U.S.C. §§ 7509(a) and (b), 7410(c).

In testimony for the third hearing, Mr. Kaleel stated that USEPA on December 22, 2008, designated areas as nonattainment for the 24-hour $PM_{2.5}$ standard. Kaleel Pre-filed Test. 2 at 3. He further stated that, in Illinois, USEPA has designated "the same areas designated previously as nonattainment for the annual $PM_{2.5}$ standard." *Id.* He added that "Illinois must develop an attainment plan and adopt control measures needed to attain the 24-hour $PM_{2.5}$ standard within three years of the effective date of U.S. EPA's decision, and Illinois must attain the standards within five years of the effective date." *Id.*

Mr. Kaleel also addressed the establishment of nonattainment areas for the 2008 8-hour ozone standard. He stated that the Agency's "initial proposal is for Illinois to recommend to USEPA to establish nonattainment boundaries for the 2008 standard that generally match the boundaries already established for the 1997 ozone standard." Kaleel Pre-filed Test. 2 at 3. He anticipated that USEPA will complete nonattainment designations in 2010, "initiating a new cycle of planning and regulatory development." *Id.* at 3-4. He expects that, because NO_x is a precursor to both ozone and PM_{2.5}, NO_x emission reductions will improve air quality. *Id.* at 4. He argues that "[t]he reductions provided by the subject NO_x RACT proposal will help to meet the new standards and should help to address any future requirements to implement RACT for the new standards." *Id.* Specifically, he claims that, "[u]nless USEPA issues new guidance regarding NO_x control technology, we expect that this RACT proposal will satisfy requirements to implement NO_x RACT under the revised NAAQS for the source categories and geographic areas to which this proposal applies." MG Answers at 1.

ECONOMIC REASONABLENESS AND TECHNICAL FEASIBILITY

Although the Board in a letter dated June 6, 2008, requested that DCEO conduct an economic impact study of the Agency's rulemaking proposal (*see* 415 ILCS 5/27(b) (2008)), the Board received no response to that request. At the second hearing, the Board received no testimony or comment regarding the absence of a response to the request. *See* Tr.3 at 96-97.

In its first notice opinion and order, the Board addressed the economic reasonableness and technical feasibility of the Agency's proposal. The Board noted that the Agency had negotiated with interested participants and agreed to revise certain provisions in order to memorialize agreements with them. Amendments to 35 Ill. Adm. Code 217, Nitrogen Oxides Emissions, and 35 Ill. Adm. Code 211, R08-19, slip op. at 20 (May 7, 2009), citing Mot. Amend 1 at 1-2; Mot. Amend 2 at 1-5. The Board noted that these amendments addressed issues including, but not limited to, compliance deadlines, deadlines for installing CEMS, and emissions limitations. Amendments to 35 Ill. Adm. Code 217, Nitrogen Oxides Emissions, and 35 Ill. Adm. Code 211, R08-19, slip op. at 20 (May 7, 2009). The Board found that, having granted the Agency's two motions to amend the proposal and having reviewed the entire record in this proceeding, the proposed rules were technically feasible and economically reasonable. *Id.*

In its second notice opinion and order, the Board again addressed the economic reasonableness and technical feasibility of the proposed rules. The Board noted that, in its first notice comments, the Agency had proposed additional clarifications of and correction to its proposal. Amendments to 35 Ill. Adm. Code 217, Nitrogen Oxides Emissions, and 35 Ill. Adm. Code 211, R08-19, slip op. at 36 (July 23, 2009). The Board found that, having incorporated those additional clarifications and corrections and having reviewed the entire record in this proceeding, the proposed rules were technically feasible and economically reasonable. *Id*.

Since adopting that second notice opinion and order, the Board has adopted only non-substantive amendments proposed by JCAR. Thus, the Board finds that the adopted regulations technically feasible and economically reasonable and below directs the Clerk to file them with the Secretary of State for publication in the *Illinois Register*.

ORDER

The Board directs the Clerk to file the following adopted amendments with the Secretary of State for publication in the *Illinois Register*. Additions are underlined, and deletions appear stricken.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR
STATIONARY SOURCES

PART 211
DEFINITIONS AND GENERAL PROVISIONS

SUBPART A: GENERAL PROVISIONS

	SUBPART A: GENERAL PROVISIONS
Section	
211.101	Incorporations by Reference
211.102	Abbreviations and Conversion Factors
C4:	SUBPART B: DEFINITIONS
Section 211.121	Other Definitions
211.122 211.130	Definitions (Repealed) Accelacota
211.150	Accumulator
211.170	Acid Gases
211.170	Actual Heat Input
211.210	Actual Heat Input Adhesive
211.230	Adhesion Promoter
211.240	Aeration
211.270	Aerosol Can Filling Line
211.270	Afterburner
211.310	Air Contaminant
211.330	Air Dried Coatings
211.350	Air Oxidation Process
211.370	Air Pollutant
211.390	Air Pollution
211.410	Air Pollution Control Equipment
211.430	Air Suspension Coater/Dryer
211.450	Airless Spray
211.470	Air Assisted Airless Spray
211.474	Alcohol
211.479	Allowance
211.484	Animal
211.485	Animal Pathological Waste
211.490	Annual Grain Through-Put
211.495	Anti-Glare/Safety Coating
211.510	Application Area
211.530	Architectural Coating
211.550	As Applied
211.560	As-Applied Fountain Solution
211.570	Asphalt
211.590	Asphalt Prime Coat
211.610	Automobile
211.630	Automobile or Light-Duty Truck Assembly Source or Automobile or Light-Duty
	Truck Manufacturing Plant
211.650	Automobile or Light-Duty Truck Refinishing
211.660	Automotive/Transportation Plastic Parts
<u>211.665</u>	Auxiliary Boiler

211.670	Baked Coatings
211.680	Bakery Oven
211.685	Basecoat/Clearcoat System
211.690	Batch Loading
211.695	Batch Operation
211.696	Batch Process Train
211.710	Bead-Dipping
211.730	Binders
211.740	Brakehorsepower (rated-bhp)
211.750	British Thermal Unit
211.770	Brush or Wipe Coating
211.790	Bulk Gasoline Plant
211.810	Bulk Gasoline Terminal
211.820	Business Machine Plastic Parts
211.830	Can
211.850	Can Coating
211.870	Can Coating Line
211.890	Capture
211.910	Capture Device
211.930	Capture Efficiency
211.950	Capture System
211.953	Carbon Adsorber
211.955	Cement
211.960	Cement Kiln
211.970	Certified Investigation
211.980	Chemical Manufacturing Process Unit
211.990	Choke Loading
	<u> </u>
211.990	Choke Loading
211.990 211.995	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act
211.990 211.995 211.1010	Choke Loading Circulating Fluidized Bed Combustor
211.990 211.995 211.1010 211.1050	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation
211.990 211.995 211.1010 211.1050 211.1070	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials
211.990 211.995 211.1010 211.1050 211.1070 211.1090	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120 211.1130	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker Closed Purge System
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120 211.1130 211.1150	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker Closed Purge System Closed Vent System
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120 211.1130 211.1150 211.1170	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker Closed Purge System Closed Vent System Coal Refuse
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120 211.1130 211.1150 211.1170 211.1190	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker Closed Purge System Closed Vent System Coal Refuse Coating
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120 211.1130 211.1150 211.1170 211.1190 211.1210	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker Closed Purge System Closed Vent System Coal Refuse Coating Coating Coating Applicator
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120 211.1130 211.1150 211.1170 211.1190 211.1210 211.1230	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker Closed Purge System Closed Vent System Coal Refuse Coating Coating Coating Applicator Coating Line
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120 211.1130 211.1150 211.1170 211.1190 211.1210 211.1230 211.1250	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker Closed Purge System Closed Vent System Coal Refuse Coating Coating Applicator Coating Line Coating Plant
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120 211.1130 211.1150 211.1170 211.1210 211.1230 211.1250 211.1270	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker Closed Purge System Closed Vent System Coal Refuse Coating Coating Applicator Coating Line Coating Plant Coil Coating
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120 211.1130 211.1150 211.1170 211.1190 211.1210 211.1230 211.1250 211.1270 211.1290	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker Closed Purge System Closed Vent System Coal Refuse Coating Coating Applicator Coating Line Coating Plant Coil Coating Line
211.990 211.995 211.1010 211.1050 211.1070 211.1090 211.1110 211.1120 211.1130 211.1150 211.1170 211.1210 211.1230 211.1250 211.1270 211.1290 211.1310	Choke Loading Circulating Fluidized Bed Combustor Clean Air Act Cleaning and Separating Operation Cleaning Materials Clear Coating Clear Topcoat Clinker Closed Purge System Closed Vent System Coal Refuse Coating Coating Applicator Coating Line Coating Plant Coil Coating Coil Coating Coil Coating Cold Cleaning

211.1316	Combustion Turbine
211.1320	Commence Commercial Operation
211.1324	Commence Operation
211.1328	Common Stack
211.1330	Complete Combustion
211.1350	Component
211.1370	Concrete Curing Compounds
211.1390	Concentrated Nitric Acid Manufacturing Process
211.1410	Condensate
211.1430	Condensible PM-10
<u>211.1435</u>	Container Glass
211.1465	Continuous Automatic Stoking
211.1467	Continuous Coater
211.1470	Continuous Process
211.1490	Control Device
211.1510	Control Device Efficiency
211.1515	Control Period
211.1520	Conventional Air Spray
211.1530	Conventional Soybean Crushing Source
211.1550	Conveyorized Degreasing
211.1570	Crude Oil
211.1590	Crude Oil Gathering
211.1610	Crushing
211.1630	Custody Transfer
211.1650	Cutback Asphalt
211.1670	Daily-Weighted Average VOM Content
211.1690	Day
211.1710	Degreaser
211.1730	Delivery Vessel
211.1740	Diesel Engine
211.1750	Dip Coating
211.1770	Distillate Fuel Oil
211.1780	Distillation Unit
211.1790	Drum
211.1810	Dry Cleaning Operation or Dry Cleaning Facility
211.1830	Dump-Pit Area
211.1850	Effective Grate Area
211.1870	Effluent Water Separator
211.1875	Elastomeric Materials
211.1880	Electromagnetic Interference/Radio Frequency Interference (EMI/RFI) Shielding
	Coatings
211.1885	Electronic Component
211.1890	Electrostatic Bell or Disc Spray
211.1900	Electrostatic Prep Coat
211.1910	Electrostatic Spray
211.1920	Emergency or Standby Unit
	- G J J

211.1930	Emission Rate
211.1950	Emission Unit
211.1970	Enamel
211.1990	Enclose
211.2010	End Sealing Compound Coat
211.2030	Enhanced Under-the-Cup Fill
211.2050	Ethanol Blend Gasoline
211.2070	Excess Air
211.2080	Excess Emissions
211.2090	Excessive Release
211.2110	Existing Grain-Drying Operation (Repealed)
211.2130	Existing Grain-Handling Operation (Repealed)
211.2150	Exterior Base Coat
211.2170	Exterior End Coat
211.2190	External Floating Roof
211.2210	Extreme Performance Coating
211.2230	Fabric Coating
211.2250	Fabric Coating Line
211.2270	Federally Enforceable Limitations and Conditions
211.2285	Feed Mill
211.2290	Fermentation Time
211.2300	Fill
211.2310	Final Repair Coat
211.2330	Firebox
211.2350	Fixed-Roof Tank
211.2355	Flare
211.2357	Flat Glass
211.2360	Flexible Coating
211.2365	Flexible Operation Unit
211.2370	Flexographic Printing
211.2390	Flexographic Printing Line
211.2410	Floating Roof
211.2420	Fossil Fuel
211.2425	Fossil Fuel-Fired
211.2430	Fountain Solution
211.2450	Freeboard Height
211.2470	Fuel Combustion Emission Unit or Fuel Combustion Emission Source
211.2490	Fugitive Particulate Matter
211.2510	Full Operating Flowrate
211.2530	Gas Service
211.2550	Gas/Gas Method
211.2570	Gasoline
211.2590	Gasoline Dispensing Operation or Gasoline Dispensing Facility
211.2610	Gel Coat
211.2620	Generator
<u>211.2625</u>	Glass Melting Furnace

211.2630	Gloss Reducers
211.2650	Grain
211.2670	Grain-Drying Operation
211.2690	Grain-Handling and Conditioning Operation
211.2710	Grain-Handling Operation
211.2730	Green-Tire Spraying
211.2750	Green Tires
211.2770	Gross Heating Value
211.2790	Gross Vehicle Weight Rating
211.2810	Heated Airless Spray
211.2815	Heat Input
211.2820	Heat Input Rate
211.2830	Heatset
211.2850	Heatset Web Offset Lithographic Printing Line
211.2870	Heavy Liquid
211.2890	Heavy Metals
211.2910	Heavy Off-Highway Vehicle Products
211.2930	Heavy Off-Highway Vehicle Products Coating
211.2950	Heavy Off-Highway Vehicle Products Coating Line
211.2970	High Temperature Aluminum Coating
211.2990	High Volume Low Pressure (HVLP) Spray
211.3010	Hood
211.3030	Hot Well
211.3050	Housekeeping Practices
211.3070	Incinerator
211.3090	Indirect Heat Transfer
211.3100	Industrial Boiler
211.3110	Ink
211.3130	In-Process Tank
211.3150	In-Situ Sampling Systems
211.3170	Interior Body Spray Coat
211.3190	Internal-Floating Roof
211.3210	Internal Transferring Area
211.3230	Lacquers
211.3250	Large Appliance
211.3270	Large Appliance Coating
211.3290	Large Appliance Coating Line
211.3300	Lean-Burn Engine
211.3310	Light Liquid
211.3330	Light-Duty Truck
211.3350	Light Oil
211.3355	Lime Kiln
211.3370	Liquid/Gas Method
211.3370	Liquid-Mounted Seal
211.3410	Liquid Service
211.3430	Liquids Dripping
211.3 130	Tidarao Diibbing

211 2170	T
211.3450	Lithographic Printing Line
211.3470	Load-Out Area
<u>211.3475</u>	Load Shaving Unit
211.3480	Loading Event
211.3483	Long Dry Kiln
211.3485	Long Wet Kiln
211.3487	Low-NO _X Burner
211.3490	Low Solvent Coating
211.3500	Lubricating Oil
211.3510	Magnet Wire
211.3530	Magnet Wire Coating
211.3550	Magnet Wire Coating Line
211.3570	Major Dump Pit
211.3590	Major Metropolitan Area (MMA)
211.3610	Major Population Area (MPA)
211.3620	Manually Operated Equipment
211.3630	Manufacturing Process
211.3650	Marine Terminal
211.3660	Marine Vessel
211.3670	Material Recovery Section
211.3690	Maximum Theoretical Emissions
211.3695	Maximum True Vapor Pressure
211.3710	Metal Furniture
211.3730	Metal Furniture Coating
211.3750	Metal Furniture Coating Line
211.3770	Metallic Shoe-Type Seal
211.3780	Mid-Kiln Firing
211.3790	Miscellaneous Fabricated Product Manufacturing Process
211.3810	Miscellaneous Formulation Manufacturing Process
211.3830	Miscellaneous Metal Parts and Products
211.3850	Miscellaneous Metal Parts and Products Coating
211.3870	Miscellaneous Metal Parts or Products Coating Line
211.3890	Miscellaneous Organic Chemical Manufacturing Process
211.3910	Mixing Operation
211.3915	Mobile Equipment
211.3930	Monitor
211.3950	Monomer
211.3960	Motor Vehicles
211.3965	Motor Vehicle Refinishing
211.3970	Multiple Package Coating
211.3980	Nameplate Capacity
211.3990	New Grain-Drying Operation (Repealed)
211.4010	New Grain-Handling Operation (Repealed)
211.4030	No Detectable Volatile Organic Material Emissions
211.4050	Non-Contact Process Water Cooling Tower
211.4055	Non-Flexible Coating

• • • • • • •	
211.4065	Non-Heatset
211.4067	NO _X Trading Program
211.4070	Offset
211.4090	One Hundred Percent Acid
211.4110	One-Turn Storage Space
211.4130	Opacity
211.4150	Opaque Stains
211.4170	Open Top Vapor Degreasing
211.4190	Open-Ended Valve
211.4210	Operator of a Gasoline Dispensing Operation or Operator of a Gasoline
	Dispensing Facility
211.4230	Organic Compound
211.4250	Organic Material and Organic Materials
211.4260	Organic Solvent
211.4270	Organic Vapor
<u>211.4280</u>	Other Glass
211.4290	Oven
211.4310	Overall Control
211.4330	Overvarnish
211.4350	Owner of a Gasoline Dispensing Operation or Owner of a Gasoline Dispensing
	Facility
211.4370	Owner or Operator
211.4390	Packaging Rotogravure Printing
211.4410	Packaging Rotogravure Printing Line
211.4430	Pail
211.4450	Paint Manufacturing Source or Paint Manufacturing Plant
211.4470	Paper Coating
211.4490	Paper Coating Line
211.4510	Particulate Matter
211.4530	Parts Per Million (Volume) or PPM (Vol)
211.4550	Person
211.4590	Petroleum
211.4610	Petroleum Liquid
211.4630	Petroleum Refinery
211.4650	Pharmaceutical
211.4670	Pharmaceutical Coating Operation
211.4690	Photochemically Reactive Material
211.4710	Pigmented Coatings
211.4730	Plant
211.4740	Plastic Part
211.4750	Plasticizers
211.4770	PM-10
211.4790	Pneumatic Rubber Tire Manufacture
211.4810	Polybasic Organic Acid Partial Oxidation Manufacturing Process
211.4830	Polyester Resin Material(s)
211.4850	Polyester Resin Products Manufacturing Process

211.4870	Polystyrene Plant
211.4890	Polystyrene Resin
211.4910	Portable Grain-Handling Equipment
211.4930	Portland Cement Manufacturing Process Emission Source
211.4950	Portland Cement Process or Portland Cement Manufacturing Plant
211.4960	Potential Electrical Output Capacity
211.4970	Potential to Emit
211.4990	Power Driven Fastener Coating
211.5010	Precoat
211.5015	Preheater Kiln
211.5020	Preheater/Precalciner Kiln
211.5030	Pressure Release
211.5050	Pressure Tank
211.5060	Pressure/Vacuum Relief Valve
211.5061	Pretreatment Wash Primer
211.5065	Primary Product
211.5070	Prime Coat
211.5080	Primer Sealer
211.5090	Primer Surfacer Coat
211.5110	Primer Surfacer Operation
211.5130	Primers
211.5150	Printing
211.5170	Printing Line
211.5185	Process Emission Source
211.5190	Process Emission Unit
<u>211.5195</u>	<u>Process Heater</u>
211.5210	Process Unit
211.5230	Process Unit Shutdown
211.5245	Process Vent
211.5250	Process Weight Rate
211.5270	Production Equipment Exhaust System
211.5310	Publication Rotogravure Printing Line
211.5330	Purged Process Fluid
211.5340	Rated Heat Input Capacity
211.5350	Reactor
211.5370	Reasonably Available Control Technology (RACT)
211.5390	Reclamation System
211.5410	Refiner
211.5430	Refinery Fuel Gas
211.5450	Refinery Fuel Gas System
211.5470	Refinery Unit or Refinery Process Unit
211.5480	Reflective Argent Coating
211.5490	Refrigerated Condenser
211.5500	Regulated Air Pollutant
211.5510	Reid Vapor Pressure
211.5530	Repair

211.5550	Repair Coat
211.5570	Repaired
211.5580	Repowering
211.5590	Residual Fuel Oil
211.5600	Resist Coat
211.5610	Restricted Area
211.5630	Retail Outlet
211.5640	Rich-Burn Engine
211.5650	Ringelmann Chart
211.5670	Roadway
211.5690	Roll Coater
211.5710	Roll Coating
211.5730	Roll Printer
211.5750	Roll Printing
211.5770	Rotogravure Printing
211.5790	Rotogravure Printing Line
211.5810	Safety Relief Valve
211.5830	Sandblasting
211.5850	Sanding Sealers
211.5870	Screening
211.5880	Screen Printing on Paper
211.5890	Sealer
211.5910	Semi-Transparent Stains
211.5930	Sensor
211.5950	Set of Safety Relief Valves
211.5970	Sheet Basecoat
211.5980	Sheet-Fed
211.5990	Shotblasting
211.6010	Side-Seam Spray Coat
211.6025	Single Unit Operation
211.6030	Smoke
211.6050	Smokeless Flare
211.6060	Soft Coat
211.6070	Solvent
211.6090	Solvent Cleaning
211.6110	Solvent Recovery System
211.6130	Source
211.6140	Specialty Coatings
211.6145	Specialty Coatings for Motor Vehicles
211.6150	Specialty High Gloss Catalyzed Coating
211.6170	Specialty Leather
211.6190	Specialty Soybean Crushing Source
211.6210	Splash Loading
211.6230	Stack
211.6250	Stain Coating
211.6270	Standard Conditions

211.6290	Standard Cubic Foot (scf)
211.6310	Start-Up
211.6330	Stationary Emission Source
211.6350	Stationary Emission Unit
211.6355	Stationary Gas Turbine
211.6360	Stationary Reciprocating Internal Combustion Engine
211.6370	Stationary Source
211.6390	Stationary Storage Tank
211.6400	Stencil Coat
211.6410	Storage Tank or Storage Vessel
211.6420	Strippable Spray Booth Coating
211.6430	Styrene Devolatilizer Unit
211.6450	Styrene Recovery Unit
211.6470	Submerged Loading Pipe
211.6490	Substrate
211.6510	Sulfuric Acid Mist
211.6530	Surface Condenser
211.6540	Surface Preparation Materials
211.6550	Synthetic Organic Chemical or Polymer Manufacturing Plant
211.6570	Tablet Coating Operation
211.6580	Texture Coat
211.6590	Thirty-Day Rolling Average
211.6610	Three-Piece Can
211.6620	Three or Four Stage Coating System
211.6630	Through-the-Valve Fill
211.6650	Tooling Resin
211.6670	Topcoat
211.6690	Topcoat Operation
211.6695	Topcoat System
211.6710	Touch-Up
211.6720	Touch-Up Coating
211.6730	Transfer Efficiency
211.6750	Tread End Cementing
211.6770	True Vapor Pressure
211.6790	Turnaround
211.6810	Two-Piece Can
211.6830	Under-the-Cup Fill
211.6850	Undertread Cementing
211.6860	Uniform Finish Blender
211.6870	Unregulated Safety Relief Valve
211.6880	Vacuum Metallizing
211.6890	Vacuum Producing System
211.6910	Vacuum Service
211.6930	Valves Not Externally Regulated
211.6950	Vapor Balance System
211.6970	Vapor Collection System
	-

211.6990	Vapor Control System
211.7010	Vapor-Mounted Primary Seal
211.7030	Vapor Recovery System
211.7050	Vapor-Suppressed Polyester Resin
211.7070	Vinyl Coating
211.7090	Vinyl Coating Line
211.7110	Volatile Organic Liquid (VOL)
211.7130	Volatile Organic Material Content (VOMC)
211.7150	Volatile Organic Material (VOM) or Volatile Organic Compound (VOC)
211.7170	Volatile Petroleum Liquid
211.7190	Wash Coat
211.7200	Washoff Operations
211.7210	Wastewater (Oil/Water) Separator
211.7230	Weak Nitric Acid Manufacturing Process
211.7250	Web
211.7270	Wholesale Purchase - Consumer
211.7290	Wood Furniture
211.7310	Wood Furniture Coating
211.7330	Wood Furniture Coating Line
211.7350	Woodworking
211.7400	Yeast Percentage

211.APPENDIX B Section into Rule Table

AUTHORITY: Implementing Sections 9, 9.1, 9.9 and 10 and authorized by Sections 27 and 28

of the Environmental Protection Act [415 ILCS 5/9, 9.1, 9.9, 10, 27 and 28].

Rule into Section Table

211.APPENDIX A

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 201: Definitions, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R74-2 and R75-5, 32 PCB 295, at 3 Ill. Reg. 5, p. 777, effective February 3, 1979; amended in R78-3 and 4, 35 PCB 75 and 243, at 3 Ill. Reg. 30, p. 124, effective July 28, 1979; amended in R80-5, at 7 Ill. Reg. 1244, effective January 21, 1983; codified at 7 Ill. Reg. 13590; amended in R82-1 (Docket A) at 10 Ill. Reg. 12624, effective July 7, 1986; amended in R85-21(A) at 11 Ill. Reg. 11747, effective June 29, 1987; amended in R86-34 at 11 Ill. Reg. 12267, effective July 10, 1987; amended in R86-39 at 11 Ill. Reg. 20804, effective December 14, 1987; amended in R82-14 and R86-37 at 12 Ill. Reg. 787, effective December 24, 1987; amended in R86-18 at 12 Ill. Reg. 7284, effective April 8, 1988; amended in R86-10 at 12 Ill. Reg. 7621, effective April 11, 1988; amended in R88-23 at 13 Ill. Reg. 10862, effective June 27, 1989; amended in R89-8 at 13 Ill. Reg. 17457, effective January 1, 1990; amended in R89-16(A) at 14 Ill. Reg. 9141, effective May 23, 1990; amended in R88-30(B) at 15 Ill. Reg. 5223, effective March 28, 1991; amended in R88-14 at 15 Ill. Reg. 7901, effective May 14, 1991; amended in R91-0 at 15 Ill. Reg. 15673, effective October 14, 1991; amended in R91-22 at 16

Ill. Reg. 7656, effective May 1, 1992; amended in R91-24 at 16 Ill. Reg. 13526, effective August 24, 1992; amended in R93-9 at 17 Ill. Reg. 16504, effective September 27, 1993; amended in R93-11 at 17 Ill. Reg. 21471, effective December 7, 1993; amended in R93-14 at 18 Ill. Reg.

1253, effective January 18, 1994; amended in R94-12 at 18 III. Reg. 14962, effective September 21, 1994; amended in R94-14 at 18 Ill. Reg. 15744, effective October 17, 1994; amended in R94-15 at 18 Ill. Reg. 16379, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16929, effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6823, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7344, effective May 22, 1995; amended in R95-2 at 19 Ill. Reg. 11066, effective July 12, 1995; amended in R95-16 at 19 Ill. Reg. 15176, effective October 19, 1995; amended in R96-5 at 20 Ill. Reg. 7590, effective May 22, 1996; amended in R96-16 at 21 Ill. Reg. 2641, effective February 7, 1997; amended in R97-17 at 21 Ill. Reg. 6489, effective May 16, 1997; amended in R97-24 at 21 Ill. Reg. 7695. effective June 9, 1997; amended in R96-17 at 21 Ill. Reg. 7856, effective June 17, 1997; amended in R97-31 at 22 III. Reg. 3497, effective February 2, 1998; amended in R98-17 at 22 III. Reg. 11405, effective June 22, 1998; amended in R01-9 at 25 III. Reg. 108, effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4597, effective March 15, 2001; amended in R01-17 at 25 Ill. Reg. 5900, effective April 17, 2001; amended in R05-16 at 29 Ill. Reg. 8181, effective May 23, 2005; amended in R05-11 at 29 III. Reg. 8892, effective June 13, 2005; amended in R04-12/20 at 30 III. Reg. 9654, effective May 15, 2006; amended in R07-18 at 31 III. Reg. 14254, effective September 25, 2007; amended in R08-6 at 32 Ill. Reg. 1387, effective January 16, 2008; amended in R07-19 at 33 III. Reg. 11982, effective August 6, 2009; amended in R08-19 at 33 Ill. Reg. _____, effective ______.

SUBPART B: DEFINITIONS

Section 211.665 Auxiliary Boiler

"Auxiliary boiler" means, for purposes of Part 217, a boiler that is operated only when the main boiler or boilers at a source are not in service and is used either to maintain building heat or to assist in the startup of the main boiler or boilers. This term does not include emergency or standby units and load shaving units.

(Source: Added at 33 Ill. Reg, effective	
--	--

Section 211.995 Circulating Fluidized Bed Combustor

"Circulating fluidized bed combustor" means, for purposes of Part 217, a fluidized bed combustor in which the majority of the fluidized bed material is carried out of the primary combustion zone and is transported back to the primary zone through a recirculation loop.

(Source: Added at 33	III. Reg. ,	effective

Section 211.1315 Combustion Tuning

"Combustion tuning" means, for purposes of Part 217, review and adjustment of a combustion process to maintain combustion efficiency of an emission unit, as performed in accordance with procedures provided by the manufacturer or by a trained technician.

(Source:	Added at	t 33 III I	Reo	. effective
would.	Audeu a	L - / - / III - I	NUE.	. CHECKIVE

Section 211.1435 Container Glass

colored, which is pressed or blown, or both, into bottles, jars, ampoules, and other products listed in Standard Industrial Classification 3221.
(Source: Added at 33 Ill. Reg, effective)
Section 211.2355 Flare
"Flare" means an open combustor without enclosure or shroud.
(Source: Added at 33 Ill. Reg, effective)
Section 211.2357 Flat Glass
"Flat glass" means, for purposes of Part 217, glass made of soda-lime recipe and produced into continuous flat sheets and other products listed in Standard Industrial Classification 3211.
(Source: Added at 33 Ill. Reg, effective)
Section 211.2625 Glass Melting Furnace
"Glass melting furnace" means, for purposes of Part 217, a unit comprising a refractory vessel in which raw materials are charged and melted at high temperature to produce molten glass.
(Source: Added at 33 Ill. Reg, effective)
Section 211.3100 Industrial Boiler
"Industrial boiler" means, for purposes of Part 217, an enclosed vessel in which water is heated and circulated either as hot water or as steam for heating or for power, or both. This term does not include a heat recovery steam generator that captures waste heat from a combustion turbine and boilers serving a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale, if such boilers meet the applicability criteria under Subpart M of Part 217.
(Source: Added at 33 Ill. Reg, effective)
Section 211.3355 Lime Kiln
"Lime kiln" means, for purposes of Part 217, an enclosed combustion device used to calcine lime mud, which consists primarily of calcium carbonate, into calcium oxide.
(Source: Added at 33 Ill. Reg, effective)

Section 211.3475 Load Shaving Unit

"Load shaving unit" means, for purposes of Part 217, a device used to generate electricity for sale or use during high electric demand days, including but not limited to stationary reciprocating internal combustion engines or turbines.

(Source:	Added at 33 II	1 Reg	. effective	`
(Bource.	nuucu ai 33 II	1. IXC2.	, CHCCHVC	

Section 211.4280 Other Glass

"Other glass" means, for purposes of Part 217, glass that is neither container glass, as that term is defined in Section 211.1435, nor flat glass, as that term is defined in Section 211.2357.

(Source: Added at 33 l	Ill. Reg	effective

Section 211.5195 Process Heater

"Process heater" means, for purposes of Part 217, an enclosed combustion device that burns gaseous or liquid fuels only and that indirectly transfers heat to a process fluid or a heat transfer medium other than water. This term does not include pipeline heaters and storage tank heaters that are primarily meant to maintain fluids at a certain temperature or viscosity.

(Source: Added at 33 Ill. Reg	, effective
-------------------------------	-------------

TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE B: AIR POLLUTION CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 217 NITROGEN OXIDES EMISSIONS

SUBPART A: GENERAL PROVISIONS

Section	
217.100	Scope and Organization
217.101	Measurement Methods
217.102	Abbreviations and Units
217.103	Definitions
217.104	Incorporations by Reference
	SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES
Section	
217.121	New Emission Sources (Repealed)

SUBPART C: EXISTING FUEL COMBUSTION EMISSION UNITS SOURCES

α	
Section 217.141	Existing Emission <u>Units</u> Sources in Major Metropolitan Areas
	SUBPART D: NO _x GENERAL REQUIREMENTS
Section 217.150 217.152 217.154 217.155 217.156 217.157 217.158	Applicability Compliance Date Performance Testing Initial Compliance Certification Recordkeeping and Reporting Testing and Monitoring Emissions Averaging Plans
	SUBPART E: INDUSTRIAL BOILERS
Section 217.160 217.162 217.164 217.165 217.166	Applicability Exemptions Emissions Limitations Combination of Fuels Methods and Procedures for Combustion Tuning
	SUBPART F: PROCESS HEATERS
Section 217.180 217.182 217.184 217.185 217.186	Applicability Exemptions Emissions Limitations Combination of Fuels Methods and Procedures for Combustion Tuning
	SUBPART G: GLASS MELTING FURNANCES
Section 217.200 217.202 217.204	Applicability Exemptions Emissions Limitations
	SUBPART H: CEMENT AND LIME KILNS
Section 217.220 217.222 217.224	Applicability Exemptions Emissions Limitations

SUBPART I: IRON AND STEEL AND ALUMINUM MANUFACTURING

Section	
217.240	<u>Applicability</u>
217.242	Exemptions
<u>217.244</u>	Emissions Limitations
	SUBPART K: PROCESS EMISSION SOURCES
Section	
217.301	Industrial Processes
	SUBPART M: ELECTRICAL GENERATING UNITS
<u>Section</u> 217.340	<u>Applicability</u>
<u>217.342</u>	Exemptions
<u>217.344</u>	Emissions Limitations
<u>217.345</u>	Combination of Fuels
	SUBPART O: CHEMICAL MANUFACTURE
Section	
217.381	Nitric Acid Manufacturing Processes

SUBPART Q: STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES AND TURBINES

Section	
217.386	Applicability
217.388	Control and Maintenance Requirements
217.390	Emissions Averaging Plans
217.392	Compliance
217.394	Testing and Monitoring
217.396	Recordkeeping and Reporting
	SUBPART T: CEMENT KILNS
Section	
217.400	Applicability
217.402	Control Requirements
217.404	Testing
217.406	Monitoring
217.408	Reporting
217.410	Recordkeeping

SUBPART U: NO_X CONTROL AND TRADING PROGRAM FOR SPECIFIED NO_X GENERATING UNITS

Section	
217.450	Purpose
217.452	Severability
217.454	Applicability
217.456	Compliance Requirements
217.458	Permitting Requirements
217.460	Subpart U NO _x Trading Budget
	- ···
217.462	Methodology for Obtaining NO _X Allocations
217.464	Methodology for Determining NO _X Allowances from the New Source Set-Aside
217.466	NO _X Allocations Procedure for Subpart U Budget Units
217.468	New Source Set-Asides for "New" Budget Units
217.470	Early Reduction Credits (ERCs) for Budget Units
217.472	Low-Emitter Requirements
217.474	Opt-In Units
217.476	Opt-In Process
217.478	Opt-In Budget Units: Withdrawal from NO _X Trading Program
217.480	Opt-In Units: Change in Regulatory Status
217.482	Allowance Allocations to Opt-In Budget Units
	SUBPART V: ELECTRIC POWER GENERATION
Section	
217.521	Lake of Egypt Power Plant
217.700	Purpose
217.702	Severability
217.704	Applicability
217.706	Emission Limitations
217.708	NO _x Averaging
217.710	Monitoring
217.712	Reporting and Recordkeeping
	SUBPART W: NO _X TRADING PROGRAM FOR ELECTRICAL
	GENERATING UNITS
Section	
217.750	Purpose
217.752	Severability
217.754	Applicability
217.756	Compliance Requirements
217.758	Permitting Requirements
217.760	NO _X Trading Budget
217.762	Methodology for Calculating NO _X Allocations for Budget Electrical
	Generating Units (EGUs)
217.764	NO _x Allocations for Budget EGUs
217.768	New Source Set-Asides for "New" Budget EGUs
217.770	Early Reduction Credits for Budget EGUs
	,

217.774	Opt-In Units
217.776	Opt-In Process
217.778	Budget Opt-In Units: Withdrawal from NO _X Trading Program
217.780	Opt-In Units: Change in Regulatory Status
217.782	Allowance Allocations to Budget Opt-In Units

SUBPART X: VOLUNTARY NO_x EMISSIONS REDUCTION PROGRAM

Section			
217.800	Purpose		
217.805	Emission Unit Eligibility		
217.810	Partic	ipation Requirements	
217.815	NO_X I	Emission Reductions and the Subpart X NO _X Trading Budget	
217.820	Baseli	ne Emissions Determination	
217.825	Calcu	lation of Creditable NO _x Emission Reductions	
217.830	Limita	ations on NO _X Emission Reductions	
217.835	NO _X Emission Reduction Proposal		
217.840	.840 Agency Action		
217.845	Emiss	ions Determination Methods	
217.850 Emissions Monitoring		ions Monitoring	
217.855	Repor	ting	
217.860	Recor	dkeeping	
217.865 Enforcement		cement	
217.APPEND	OIX A	Rule into Section Table	
217.APPEND	OIX B	Section into Rule Table	
217.APPEND	OIX C	Compliance Dates	
217.APPEND	OIX D	Non-Electrical Generating Units	
217.APPEND	OIX E	Large Non-Electrical Generating Units	
217.APPEND	OIX F	Allowances for Electrical Generating Units	
217.APPEND	OIX G	Existing Reciprocating Internal Combustion Engines Affected by the NO _x	
217 A DDENE		SIP Call	
<u>217.APPEND</u>	<u>их н</u>	Compliance Dates for Certain Emissions Units at Petroleum Refineries	

AUTHORITY: Implementing Sections 9.9 and 10 and authorized by Sections 27 and 28 of the Environmental Protection Act [415 ILCS 5/9.9, 10, 27 and 28].

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 207: Nitrogen Oxides Emissions, R71-23, 4 PCB 191, April 13, 1972, filed and effective April 14, 1972; amended at 2 Ill. Reg. 17, p. 101, effective April 13, 1978; codified at 7 Ill. Reg. 13609; amended in R01-9 at 25 Ill. Reg. 128, effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4597, effective March 15, 2001; amended in R01-16 and R01-17 at 25 Ill. Reg. 5914, effective April 17, 2001; amended in R07-18 at 31 Ill. Reg. 14271, effective September 25, 2007; amended in 07-19 at 33 Ill. Reg. 11999, effective August 6, 2009; amended in R08-19 at 33 Ill. Reg. _____, effective ______.

SUBPART A: GENERAL PROVISIONS

Section 217.100 Scope and Organization

- a) This Part sets standards and limitations for emission of oxides of nitrogen from stationary sources.
- b) Permits for sources subject to this Part may be required pursuant to 35 Ill. Adm. Code 201 or Section 39.5 of the Act.
- c) Notwithstanding the provisions of this Part the air quality standards contained in 35 Ill. Adm. Code 243 may not be violated.
- d) These rules have been grouped for convenience of the public; the scope of each is determined by its language and history.

(Source: Amended at 33 Ill. Reg. ____, effective _____)

Section 217.104 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

- a) The phenol disulfonic acid procedures, as published in 40 CFR 60, Appendix A, Method 7 (2000);
- b) 40 CFR 96, subparts B, D, G, and H (1999);
- c) 40 CFR 96.1 through 96.3, 96.5 through 96.7, 96.50 through 96.54, 96.55 (a) & (b), 96.56 and 96.57 (1999);
- d) 40 CFR 60, 72, 75 & 76 (2006);
- e) Alternative Control Techniques Document -- NO_x Emissions from Cement Manufacturing, EPA-453/R-94-004, U. S. Environmental Protection Agency-Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, March 1994;
- f) Section 11.6, Portland Cement Manufacturing, AP-42 Compilation of Air Emission Factors, Volume 1: Stationary Point and Area Sources, U.S. Environmental Protection Agency-Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, revised January 1995;
- g) 40 CFR 60.13 (2001);
- h) 40 CFR 60, Appendix A, Methods 3A, 7, 7A, 7C, 7D, 7E, 19, and 20 (2000);

- i) ASTM D6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers (2000);
- jk) Standards of Performance for Stationary Combustion Turbines, 40 CFR 60, Subpart KKKK, 60.4400 (2006);
- <u>kl</u>) Compilation of Air Pollutant Emission Factors: AP-42, Volume I: Stationary Point and Area Sources (2000), USEPA;
- 1) 40 CFR 60, Appendix A, Methods 1, 2, 3, and 4 (2008);
- m) Alternative Control Techniques Document NO_x Emissions from Industrial/Commercial/Institutional (ICI) Boilers, EPA-453/R-94-022, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, March 1994;
- n) Alternative Control Techniques Document NO_x Emissions from Process Heaters (Revised), EPA-453/R-93-034, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, September 1993;
- o) Alternative Control Techniques Document NO_x Emissions from Glass

 Manufacturing, EPA-453/R-94-037, U. S. Environmental Protection Agency,

 Office of Air and Radiation, Office of Air Quality Planning and Standards,

 Research Triangle Park, N. C. 27711, June 1994;
- <u>Alternative Control Techniques Document NO_x Emissions from Iron and Steel Mills, EPA-453/R-94-065, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, September 1994;</u>
- <u>q)</u> 40 CFR 60 and 75 (2008); and
- r) 40 CFR 60, Appendix B, Performance Specification 16, 74 FR 12575 (March 25, 2009).

(Source: A	mended at 33	Ill. Reg	effective

SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

Section 217.121 New Emission Sources (Repealed)

No person shall cause or allow the emission of nitrogen oxides (NO_X) into the atmosphere in any one hour period from any new fuel combustion emission source with an actual heat input equal to or greater than 73.2 MW (250 mmbtu/hr) to exceed the following standards and limitations:

- a) For gaseous fossil fuel firing, 0.310 kg/MW-hr (0.20 lbs/mmbtu) of actual heat input;
- b) For liquid fossil fuel firing, 0.464 kg/MW-hr (0.30 lbs/mmbtu) of actual heat input;
- e) For dual gaseous and liquid fossil fuel firing, 0.464 kg/MW-hr (0.30 lbs/mmbtu) of actual heat input;
- d) For solid fossil fuel firing, 1.08 kg/MW-hr (0.7 lbs./mmbtu) of actual heat input;
- e) For fuel combustion emission sources burning simultaneously any combination of solid, liquid and gaseous fossil fuels, an allowable emission rate shall be determined by the following equation:

$$E = (AG + BL + CS) Q$$

Where:

E = Allowable nitrogen oxides emissions rate

Q = Actual heat input derived from all fossil fuels

G = Percent of actual heat input derived from gaseous fossil fuel

L = Percent of actual heat input derived from liquid fossil fuel

S = Percent of actual heat input derived from solid fossil fuel

$$G + L + S = 100.0$$

and, where A, B, C and appropriate metric and English units are determined from the following table:

	Metric	English
E	kg/hr	lbs/hr
Q	\overline{MW}	mmbtu/hr
A	0.023	0.003
B	0.023	0.003
\mathbf{c}	0.053	0.007

(Source: Repealed at 33 Ill. Reg. _____, effective _____)

SUBPART C: EXISTING FUEL COMBUSTION EMISSION UNITS SOURCES

Section 217.141 Existing Emission Units Sources in Major Metropolitan Areas

No person shall cause or allow the emission of nitrogen oxides into the atmosphere in any one hour period from any existing fuel combustion emission <u>unit</u> source with an actual heat input equal to or greater than 73.2 MW (250 mmbtu/hr), located in the Chicago or St. Louis (Illinois) major metropolitan areas to exceed the following limitations:

- a) For gaseous and/or liquid fossil fuel firing, 0.46 kg/MW-hr (0.3 lbs/mmbtu) of actual heat input;
- b) For solid fossil fuel firing, 1.39 kg/MW-hr (0.9 lbs/mmbtu) of actual heat input;
- c) For fuel combustion emission <u>units</u> sources-burning simultaneously any combination of solid, liquid and gaseous fuel, the allowable emission rate shall be determined by the following equation:

$$E = (AG + BL + CS) Q$$

Where:

E = allowable nitrogen oxides emissions rate
Q = actual heat input
G = percent of actual heat input derived from gaseous fossil fuel
L = percent of actual heat input derived from liquid fossil fuel
S = percent of actual heat input derived from solid fossil fuel G + L + S = 100.0

and where A, B, and C and appropriate metric and English units are determined from the following table:

	<u>Metric</u>	English
E	kg/hr	lbs/hr
Q	\overline{MW}	mmbtu/hr
A	0.023	0.003
В	0.023	0.003
C	0.068	0.009

- <u>d)</u> Exceptions: This <u>Section</u> rule shall not apply to <u>the following:</u>
 - 1) Existing existing fuel combustion units sources that which are either cyclone fired boilers burning solid or liquid fuel, or horizontally opposed fired boilers burning solid fuel; or-
 - 2) Emission units that are subject to the emissions limitations of Subpart E, F, G, H, M, or Q of this Part.

/C	Amended at 33	T11 D	CC .	
(Source:	Amended at 33	III Kea	. effective	
(Dource, 1	michaca at 33	m. Kcz.	. CHCCHYC	

SUBPART D: NO_x GENERAL REQUIREMENTSINDUSTRIAL BOILERS

Section 217.150 Applicability

- <u>a)</u> Applicability
 - 1) The provisions of this Subpart and Subparts E, F, G, H, I and M of this Part apply to the following:
 - All sources that are located in either one of the following areas and that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year:
 - i) The area composed of the Chicago area counties of Cook,
 DuPage, Kane, Lake, McHenry, and Will, the Townships
 of Aux Sable and Goose Lake in Grundy County, and the
 Township of Oswego in Kendall County; or
 - <u>ii</u>) The area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County; and
 - B) Any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources described in subsection (a)(1)(A) of this Section that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season.
 - 2) For purposes of this Section, "potential to emit" means the quantity of NO_x that potentially could be emitted by a stationary source before add-on controls based on the design capacity or maximum production capacity of the source and 8,760 hours per year or the quantity of NO_x that potentially could be emitted by a stationary source as established in a federally enforceable permit.
- b) If a source ceases to fulfill the emissions criteria of subsection (a) of this Section, the requirements of this Subpart and Subpart E, F, G, H, I or M of this Part continue to apply to any emission unit that was ever subject to the provisions of any of those Subparts.
- <u>c)</u> The provisions of this Subpart do not apply to afterburners, flares, and incinerators.
- d) Where a construction permit, for which the application was submitted to the Agency prior to the adoption of this Subpart, is issued that relies on decreases in

emissions of NO_x from existing emission units for purposes of netting or emission offsets, such NO_x decreases remain creditable notwithstanding any requirements that may apply to the existing emission units pursuant to this Subpart and Subpart E, F, G, H, I or M of this Part .

e) The owner or operator of an emission unit that is subject to this Subpart and Subpart E, F, G, H, I or M of this Part must operate such unit in a manner consistent with good air pollution control practice to minimize NO_x emissions.

Section 217.152 Compliance Date

- a) Compliance with the requirements of Subparts E, F, G, H, I and M by an owner or operator of an emission unit that is subject to any of those Subparts is required beginning January 1, 2012.
- Notwithstanding subsection (a) of this Section, compliance with the requirements of Subpart G of this Part by an owner or operator of an emission unit subject to Subpart G of this Part shall be extended until December 31, 2014, if such units are required to meet emissions limitations for NOx, as measured using a continuous emissions monitoring system, and included within a legally enforceable order on or before December 31, 2009, whereby such emissions limitations are less than 30 percent of the emissions limitations set forth under Section 217.204.
- Notwithstanding subsection (a) of this Section, the owner or operator of emission <u>c)</u> units subject to Subpart E or F of this Part and located at a petroleum refinery must comply with the requirements of this Subpart and Subpart E or F of this Part, as applicable, for those emission units beginning January 1, 2012, except that the owner or operator of emission units listed in Appendix H must comply with the requirements of this Subpart, including the option of demonstrating compliance with the applicable Subpart through an emissions averaging plan under Section 217.158 and Subpart E or F of this Part, as applicable, for the listed emission units beginning on the dates set forth in Appendix H. With Agency approval, the owner or operator of emission units listed in Appendix H may elect to comply with the requirements of this Subpart and Subpart E or F of this Part, as applicable, by reducing the emissions of emission units other than those listed in Appendix H, provided that the emissions limitations of such other emission units are equal to or more stringent than the applicable emissions limitations set forth in Subpart E or F of this Part, as applicable, by the dates set forth in Appendix H.

(Source:	Added at 33 III. I	Reg	effective
GOUICE.	Audeu al oo iii. I	NGS.	CHECHVE

Section 217.154 Performance Testing

- a) Performance testing of NO_x emissions for emission units constructed on or before July 1, 2011, and subject to emissions limitations under Subpart E, F, G, H or I of this Part must be conducted in accordance with Section 217.157 of this Subpart. Except as provided for under Section 217.157(a)(4) and (e)(1), this subsection does not apply to owners and operators of emission units demonstrating compliance through a continuous emissions monitoring system, predictive emission monitoring system, or combustion tuning.
- b) Performance testing of NO_x emissions for emission units for which construction or modification occurs after July 1, 2011, and that are subject to emissions limitations under Subpart E, F, G, H or I of this Part must be conducted within 60 days of achieving maximum operating rate but no later than 180 days after initial startup of the new or modified emission unit, in accordance with Section 217.157 of this Subpart. Except as provided for under Section 217.157(a)(4) and (e)(1), this subsection does not apply to owners and operators of emission units demonstrating compliance through a continuous emissions monitoring system, predictive emission monitoring system, or combustion tuning.
- Notification of the initial startup of an emission unit subject to subsection (b) of this Section must be provided to the Agency no later than 30 days after initial startup.
- d) The owner or operator of an emission unit subject to subsection (a) or (b) of this Section must notify the Agency of the scheduled date for the performance testing in writing at least 30 days before such date and five days before such date.
- e) If demonstrating compliance through an emissions averaging plan, at least 30 days before changing the method of compliance, the owner or operator of an emission unit must submit a written notification to the Agency describing the new method of compliance, the reason for the change in the method of compliance, and the scheduled date for performance testing, if required. Upon changing the method of compliance, the owner or operator of an emission unit must submit to the Agency a revised compliance certification that meets the requirements of Section 217.155.

(Source: Added at 33 Ill. Reg. _____, effective _____)

Section 217.155 Initial Compliance Certification

a) By the applicable compliance date set forth under Section 217.152, an owner or operator of an emission unit subject to Subpart E, F, G, H or I of this Part who is not demonstrating compliance through the use of a continuous emissions monitoring system must certify to the Agency that the emission unit will be in compliance with the applicable emissions limitation of Subpart E, F, G, H or I of this Part beginning on such applicable compliance date. The performance testing certification must include the results of the performance testing performed in

- accordance with Section 217.154(a) and (b) and the calculations necessary to demonstrate that the subject emission unit will be in initial compliance.
- b) By the applicable compliance date set forth under Section 217.152, an owner or operator of an emission unit subject to Subpart E, F, G, H, I or M of this Part who is demonstrating compliance through the use of a continuous emissions monitoring system must certify to the Agency that the affected emission units will be in compliance with the applicable emissions limitation of Subpart E, F, G, H, I, or M of this Part beginning on such applicable compliance date. The compliance certification must include a certification of the installation and operation of a continuous emissions monitoring system required under Section 217.157 and the monitoring data necessary to demonstrate that the subject emission unit will be in initial compliance.

(Source: Added at 33 Ill	. Reg.	. effective)
١	200100111000000000000000000000000000000			-/

Section 217.156 Recordkeeping and Reporting

- a) The owner or operator of an emission unit subject to Subpart E, F, G, H, I or M of this Part must keep and maintain all records used to demonstrate initial compliance and ongoing compliance with the requirements of those Subparts.
 - 1) Except as otherwise provided under this Subpart or Subpart E, F, G, H, I or M of this Part, copies of such records must be submitted by the owner or operator of the source to the Agency within 30 days after receipt of a written request by the Agency.
 - 2) Such records must be kept at the source and maintained for at least five years and must be available for immediate inspection and copying by the Agency.
- b) The owner or operator of an emission unit subject to Subpart E, F, G, H, I or M of this Part must maintain records that demonstrate compliance with the requirements of those Subparts, as applicable, that include the following:
 - 1) Identification, type (e.g., gas-fired), and location of each unit.
 - 2) Calendar date of the record.
 - 3) Monthly, seasonal, and annual operating hours.
 - 4) Type and quantity of each fuel used monthly, seasonally, and annually.
 - 5) Product and material throughput, as applicable.

- 6) Reports for all applicable emissions tests for NO_x conducted on the unit, including results.
- 7) The date, time, and duration of any startup, shutdown, or malfunction in the operation of any emission unit subject to Subpart E, F, G, H, I or M of this Part or any emissions monitoring equipment. The records must include a description of the malfunction and corrective maintenance activity.
- 8) A log of all maintenance and inspections related to the unit's air pollution control equipment for NO_x that is performed on the unit.
- 9) A log for the NO_x monitoring device, if present, including periods when not in service and maintenance and inspection activities that are performed on the device.
- 10) Identification of time periods for which operating conditions and pollutant data were not obtained by the continuous emissions monitoring system, including the reasons for not obtaining sufficient data and a description of corrective actions taken.
- 11) If complying with the emissions averaging plan provisions of Section 217.158, copies of the calculations used to demonstrate compliance with the ozone season and annual control period limitations, noncompliance reports for the ozone season, and ozone and annual control period compliance reports submitted to the Agency.
- <u>C)</u> The owner or operator of an industrial boiler subject to Subpart E of this Part must maintain records in order to demonstrate compliance with the combustion tuning requirements under Section 217.166.
- d) The owner or operator of a process heater subject to Subpart F of this Part must maintain records in order to demonstrate compliance with the combustion tuning requirements under Section 217.186.
- e) The owner or operator of an emission unit subject to Subpart E, F, G, H, I or M of this Part must maintain records in order to demonstrate compliance with the testing and monitoring requirements under Section 217.157.
- <u>The owner or operator of an emission unit subject to Subpart E, F, G, H or I of this Part must provide the following information with respect to performance testing pursuant to Section 217.157:</u>
 - 1) Submit a testing protocol to the Agency at least 60 days prior to testing;

- 2) Notify the Agency at least 30 days in writing prior to conducting performance testing for NO_x emissions and five days prior to such testing;
- 3) Not later than 60 days after the completion of the test, submit the results of the test to the Agency; and
- 4) If, after the 30-days' notice for an initially scheduled test is sent, there is a delay (e.g., due to operational problems) in conducting the test as scheduled, the owner or operator of the unit must notify the Agency as soon as practicable of the delay in the original test date, either by providing at least seven days' prior notice of the rescheduled date of the test or by arranging a new test date with the Agency by mutual agreement.
- The owner or operator of an emission unit subject to Subpart E, F, G, H, I or M of this Part must notify the Agency of any exceedances of an applicable emissions limitation of Subpart E, F, G, H, I or M of this Part by sending the applicable report with an explanation of the causes of such exceedances to the Agency within 30 days following the end of the applicable compliance period in which the emissions limitation was not met.
- Mithin 30 days after the receipt of a written request by the Agency, the owner or operator of an emission unit that is exempt from the requirements of Subpart E, F, G, H, I or M of this Part must submit records that document that the emission unit is exempt from those requirements to the Agency.
- i) If demonstrating compliance through an emissions averaging plan, by March 1 following the applicable calendar year, the owner or operator must submit to the Agency a report that demonstrates the following:
 - 1) For all units that are part of the emissions averaging plan, the total mass of allowable NO_X emissions for the ozone season and for the annual control period;
 - 2) The total mass of actual $NO_{\underline{X}}$ emissions for the ozone season and annual control period for each unit included in the averaging plan;
 - 3) The calculations that demonstrate that the total mass of actual $NO_{\underline{X}}$ emissions are less than the total mass of allowable $NO_{\underline{X}}$ emissions using equations in Section 217.158(f); and
 - 4) The information required to determine the total mass of actual $NO_{\underline{X}}$ emissions.
- j) The owner or operator of an emission unit subject to the requirements of Section 217.157 and demonstrating compliance through the use of a continuous emissions

monitoring system must submit to the Agency a report within 30 days after the end of each calendar quarter. This report must include the following:

- 1) Information identifying and explaining the times and dates when continuous emissions monitoring for NO_x was not in operation, other than for purposes of calibrating or performing quality assurance or quality control activities for the monitoring equipment; and
- 2) An excess emissions and monitoring systems performance report in accordance with the requirements of 40 CFR 60.7(c) and (d) and 60.13, or 40 CFR 75, or an alternate procedure approved by the Agency and USEPA.
- k) The owner or operator of an emission unit subject to Subpart M of this Part must comply with the compliance certification and recordkeeping and reporting requirements in accordance with 40 CFR 96, or an alternate procedure approved by the Agency and USEPA.

(Source: Added at 33 Ill. Reg, effective	•
--	---

Section 217.157 Testing and Monitoring

- a) Industrial Boilers and Process Heaters
 - The owner or operator of an industrial boiler subject to Subpart E of this 1) Part with a rated heat input capacity greater than 250 mmBtu/hr must install, calibrate, maintain, and operate a continuous emissions monitoring system on the emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 75, as incorporated by reference in Section 217.104. However, the owner or operator of an industrial boiler subject to Subpart E of this Part with a rated heat input capacity greater than 250 mmBtu/hr that combusts blast furnace gas with up to 10% natural gas on an annual basis and located at a source that manufactures iron and steel is not required to install, calibrate, maintain, and operate a continuous emissions monitoring system on such industrial boiler, provided the heat input from natural gas does not exceed 10% on an annual basis and the owner or operator complies with the performance test requirements under this Section and demonstrates, during each performance test, that NO_x emissions from such industrial boiler are less than 70% of the applicable emissions limitation under Section 217.164. In the event such owner or operator is unable to meet the requirements of this paragraph, a continuous emissions monitoring system is required within 12 months of such event, or by December 31, 2012, whichever is later.

- The owner or operator of an industrial boiler subject to Subpart E of this Part with a rated heat input capacity greater than 100 mmBtu/hr but less than or equal to 250 mmBtu/hr must install, calibrate, maintain, and operate a continuous emissions monitoring system on such emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104.
- The owner or operator of a process heater subject to Subpart F of this Part with a rated heat input capacity greater than 100 mmBtu/hr must install, calibrate, maintain, and operate a continuous emissions monitoring system on the emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3 and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104.
- 4) If demonstrating compliance through an emissions averaging plan, the owner or operator of an industrial boiler subject to Subpart E of this Part, or a process heater subject to Subpart F of this Part, with a rated heat input capacity less than or equal to 100 mmBtu/hr and not demonstrating compliance through a continuous emissions monitoring system must have an initial performance test conducted pursuant to subsection (a)(4)(B) of this Section and Section 217.154.
 - An owner or operator of an industrial boiler or process heater must have subsequent performance tests conducted pursuant to subsection (a)(4)(B) of this Section at least once every five years.

 When in the opinion of the Agency or USEPA, it is necessary to conduct testing to demonstrate compliance with Section 217.164 or 217.184, as applicable, the owner or operator of an industrial boiler or process heater must, at his or her own expense, have such test conducted in accordance with the applicable test methods and procedures specified in this Section within 90 days of receipt after a notice to test from the Agency or USEPA.
 - B) The owner or operator of an industrial boiler or process heater must have a performance test conducted using 40 CFR 60, subpart A and appendix A, Method 1, 2, 3, 4, 7E, or 19, as incorporated by reference in Section 217.104, or other alternative USEPA methods approved by the Agency. Each performance test must consist of three separate runs, each lasting a minimum of 60 minutes. NO_x emissions must be measured while the industrial boiler is operating at maximum operating capacity or while the process heater is operating at normal maximum load. If the industrial boiler or process heater has combusted more than one type of fuel in the

prior year, a separate performance test is required for each fuel. If a combination of fuels is typically used, a performance test may be conducted, with Agency approval, on such combination of fuels typically used. Except as provided under subsection (e) of this Section, this subsection (a)(4)(B) does not apply if such owner or operator is demonstrating compliance with an emissions limitation through a continuous emissions monitoring system under subsection (a)(1), (a)(2), (a)(3), or (a)(5) of this Section.

- Instead of complying with the requirements of subsection (a)(4) of this Section, an owner or operator of an industrial boiler subject to Subpart E of this Part, or a process heater subject to Subpart F of this Part, with a rated heat input capacity less than or equal to 100 mmBtu/hr may install and operate a continuous emissions monitoring system on such emission unit in accordance with the applicable requirements of 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3 and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104. The continuous emissions monitoring system must be used to demonstrate compliance with the applicable emissions limitation or emissions averaging plan on an ozone season and annual basis.
- Notwithstanding subsection (a)(2) of this Section, the owner or operator of an auxiliary boiler subject to Subpart E of this Part with a rated heat input capacity less than or equal to 250 mmBtu/hr and a capacity factor of less than or equal to 20% is not required to install, calibrate, maintain, and operate a continuous emissions monitoring system on such boiler for the measurement of NO_x emissions discharged into the atmosphere, but must comply with the performance test requirements under subsection (a)(4) of this Section.
- b) Glass Melting Furnaces; Cement Kilns; Lime Kilns; Iron and Steel Reheat,
 Annealing, and Galvanizing Furnaces; and Aluminum Reverberatory and
 Crucible Furnaces
 - An owner or operator of a glass melting furnace subject to Subpart G of this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnace subject to Subpart H of this Part that has the potential to emit NO_x in an amount equal to or greater than one ton per day must install, calibrate, maintain, and operate a continuous emissions monitoring system on such emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104.

- An owner or operator of a glass melting furnace subject to Subpart G of this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnace subject to Subpart I of this Part that has the potential to emit NO_x in an amount less than one ton per day must have an initial performance test conducted pursuant to subsection (b)(4) of this Section and Section 217.154.
- An owner or operator of a glass melting furnace subject to Subpart G of this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron and steel reheat, annealing, galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnace subject to Subpart I of this Part that has the potential to emit NO_x in an amount less than one ton per day must have subsequent performance tests conducted pursuant to subsection (b)(4) of this Section as follows:
 - A) For all glass melting furnaces subject to Subpart G of this Part, cement kilns or lime kilns subject to Subpart H of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnaces subject to Subpart I of this Part, including all such units included in an emissions averaging plan, at least once every five years; and
 - B) When, in the opinion of the Agency or USEPA, it is necessary to conduct testing to demonstrate compliance with Section 217.204, 217.224, or 217.244, of this Part, as applicable, the owner or operator of a glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, or aluminum reverberatory or crucible furnace must, at his or her own expense, have such test conducted in accordance with the applicable test methods and procedures specified in this Section within 90 days after receipt of a notice to test from the Agency or USEPA.
- The owner or operator of a glass melting furnace, cement kiln, or lime kiln must have a performance test conducted using 40 CFR 60, subpart A and appendix A, Methods 1, 2, 3, 4, and 7E, as incorporated by reference in Section 217.104 of this Part, or other alternative USEPA methods approved by the Agency. The owner or operator of an iron and steel reheat, annealing, or galvanizing furnace, or aluminum reverberatory or crucible furnace must have a performance test conducted using 40 CFR 60, subpart A and appendix A, Method 1, 2, 3, 4, 7E, or 19, as incorporated by reference in Section 217.104 of this Part, or other alternative USEPA methods approved by the Agency. Each performance test must consist of three separate runs, each lasting a minimum of 60 minutes. NO_x emissions must be measured while the glass melting

furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, or aluminum reverberatory or crucible furnace is operating at maximum operating capacity. If the glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, or aluminum reverberatory or crucible furnace has combusted more than one type of fuel in the prior year, a separate performance test is required for each fuel. Except as provided under subsection (e) of this Section, this subsection (b)(4) does not apply if such owner or operator is demonstrating compliance with an emissions limitation through a continuous emissions monitoring system under subsection (b)(1) or (b)(5) of this Section.

- Instead of complying with the requirements of subsections (b)(2), (b)(3), and (b)(4) of this Section, an owner or operator of a glass melting furnace subject to Subpart G of this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnace subject to Subpart I of this Part that has the potential to emit NO_x in an amount less than one ton per day may install and operate a continuous emissions monitoring system on such emission unit in accordance with the applicable requirements of 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104 of this Part. The continuous emissions monitoring system must be used to demonstrate compliance with the applicable emissions limitation or emissions averaging plan on an ozone season and annual basis.
- <u>Fossil Fuel-Fired Stationary Boilers.</u> The owner or operator of a fossil fuel-fired stationary boiler subject to Subpart M of this Part must install, calibrate, maintain, and operate a continuous emissions monitoring system on such emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 96, subpart H.
- d) Common Stacks. If two or more emission units subject to Subpart E, F, G, H, I, M, or Q of this Part are served by a common stack and the owner or operator of such emission units is operating a continuous emissions monitoring system, the owner or operator may, with written approval from the Agency, utilize a single continuous emissions monitoring system for the combination of emission units subject to Subpart E, F, G, H, I,M, or Q of this Part that share the common stack, provided such emission units are subject to an emissions averaging plan under this Part.
- e) Compliance with the continuous emissions monitoring system (CEMS) requirements by an owner or operator of an emission unit who is required to install, calibrate, maintain, and operate a CEMS on the emission unit under subsection (a)(1), (a)(2), (a)(3), or (b)(1) of this Section, or who has elected to

comply with the CEMS requirements under subsection (a)(5) or (b)(5) of this Section, or who has elected to comply with the predictive emission monitoring system (PEMS) requirements under subsection (f) of this Section, is required by the following dates:

- 1) For the owner or operator of an emission unit that is subject to a compliance date in calendar year 2012 under Section 217.152, compliance with the CEMS or PEMS requirements, as applicable, under this Section for such emission unit is required by December 31, 2012, provided that, during the time between the compliance date and December 31, 2012, the owner or operator must comply with the applicable performance test requirements under this Section and the applicable recordkeeping and reporting requirements under this Subpart. For the owner or operator of an emission unit that is in compliance with the CEMS or PEMS requirements, as applicable, under this Section on January 1, 2012, such owner or operator is not required to comply with the performance test requirements under this Section.
- 2) For the owner or operator of an emission unit that is subject to a compliance date in a calendar year other than calendar year 2012 under Section 217.152 of this Subpart, compliance with the CEMS or PEMS requirements, as applicable, under this Section for such emission unit is required by the applicable compliance date, and such owner or operator is not required to comply with the performance test requirements under this Section.
- As an alternative to complying with the requirements of this Section, other than the requirements under subsections (a)(1) and (c) of this Section, the owner or operator of an emission unit who is not otherwise required by any other statute, regulation, or enforceable order to install, calibrate, maintain, and operate a CEMS on the emission unit may comply with the specifications and test procedures for a predictive emission monitoring system (PEMS) on the emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with the requirements of 40 CFR 60, subpart A and appendix B, Performance Specification 16. The PEMS must be used to demonstrate compliance with the applicable emissions limitation or emissions averaging plan on an ozone season and annual basis.

(Source: Added at 33 Ill. Reg. _____, effective ______)

Section 217.158 Emissions Averaging Plans

a) Notwithstanding any other emissions averaging plan provisions under this Part, an owner or operator of a source with certain emission units subject to Subpart E, F,
 G, H, I or M of this Part, or subject to Subpart Q of this Part that are located in either one of the areas set forth under Section 217.150(a)(1)(A)(i) or (ii), may

demonstrate compliance with the applicable Subpart through an emissions averaging plan. An emissions averaging plan can only address emission units that are located at one source and each unit may only be covered by one emissions averaging plan. Such emission units at the source are affected units and are subject to the requirements of this Section.

- 1) The following units may be included in an emissions averaging plan:
 - A) Units that commenced operation on or before January 1, 2002.
 - B) Units that the owner or operator may claim as exempt pursuant to Section 217.162, 217.182, 217.202, 217.222, 217.242, or 217.342 of this Part, as applicable, but does not claim exempt. For as long as such a unit is included in an emissions averaging plan, it will be treated as an affected unit and subject to the applicable emissions limitations, and testing, monitoring, recordkeeping and reporting requirements.
 - Units that commence operation after January 1, 2002, if the unit replaces a unit that commenced operation on or before January 1, 2002, or it replaces a unit that replaced a unit that commenced operation on or before January 1, 2002. The new unit must be used for the same purpose and have substantially equivalent or less process capacity or be permitted for less NO_x emissions on an annual basis than the actual NO_x emissions of the unit or units that are replaced. Within 90 days after permanently shutting down a unit that is replaced, the owner or operator of such unit must submit a written request to withdraw or amend the applicable permit to reflect that the unit is no longer in service before the replacement unit may be included in an emissions averaging plan.
- 2) The following types of units may not be included in an emissions averaging plan:
 - A) Units that commence operation after January 1, 2002, except as provided by subsection (a)(1)(C) of this Section.
 - B) Units that the owner or operator is claiming are exempt pursuant to Section 217.162, 217.182, 217.202, 217.222, 217.242, or 217.342 of this Part, as applicable.
 - <u>Units that are required to meet emission limits or control</u>
 requirements for NO_x, as provided for in an enforceable order,
 unless the order allows for emissions averaging. In the case of
 petroleum refineries, this subsection (a)(2)(C) does not prohibit
 including industrial boilers or process heaters, or both, in an

emissions averaging plan when an enforceable order does not prohibit the reductions made under the order from also being used for compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area.

- b) An owner or operator must submit an emissions averaging plan to the Agency by January 1, 2012. The plan must include, but is not limited to, the following:
 - 1) The list of affected units included in the plan by unit identification number; and
 - 2) A sample calculation demonstrating compliance using the methodology provided in subsection (f) of this Section for the ozone season (May 1 through September 30) and calendar year (January 1 through December 31).
- An owner or operator may amend an emissions averaging plan only once per calendar year. Such an amended plan must be submitted to the Agency by January 1 of the applicable calendar year. If an amended plan is not received by the Agency by January 1 of the applicable calendar year, the previous year's plan will be the applicable emissions averaging plan.
- d) Notwithstanding subsection (c) of this Section:
 - 1) If a unit that is listed in an emissions averaging plan is taken out of service, the owner or operator must submit to the Agency, within 30 days after such occurrence, an updated emissions averaging plan; or
 - 2) If a unit that was exempt from the requirements of Subpart E, F, G, H, I, or M of this Part pursuant to Section 217.162, 217.182, 217.202, 217.222, 217.242 or 217.342, of this Part, as applicable, no longer qualifies for an exemption, the owner or operator may amend its existing averaging plan to include such unit within 30 days after the unit no longer qualifies for the exemption.
- e) An owner or operator must:
 - 1) Demonstrate compliance for the ozone season (May 1 through September 30) and the calendar year (January 1 through December 31) by using the methodology and the units listed in the most recent emissions averaging plan submitted to the Agency pursuant to subsection (b) of this Section, the monitoring data or test data determined pursuant to Section 217.157, and the actual hours of operation for the applicable averaging plan period; and

- 2) Submit to the Agency, by March 1 following each calendar year, a compliance report containing the information required by Section 217.156(i).
- $\frac{f)}{\text{The total mass of actual NO}_{\underline{X}} \text{ emissions from the units listed in the emissions}}{\text{averaging plan must be equal to or less than the total mass of allowable NO}_{\underline{X}}}{\text{emissions for those units for both the ozone season and calendar year. The following equation must be used to determine compliance:}}$

$$N_{act} \leq N_{all}$$

Where: $\frac{\sum_{i=1}^{n} \sum_{j=1}^{k} EM_{act(i,j)}}{\sum_{i=1}^{n} \sum_{j=1}^{k} EM_{all(i,j)}}$ Total sum of the actual NO_X mass emissions from units N_{act} included in the averaging plan for each fuel used (tons per ozone season and year). Total sum of the allowable NO_x mass emissions from units N_{all} Ξ included in the averaging plan for each fuel used (tons per ozone season and year). $EM_{act(i)} =$ Total mass of actual NO_X emissions in tons for a unit as determined in subsection (f)(1) of this Section. Subscript denoting an individual unit. J Subscript denoting the fuel type used. K Number of different fuel types. Number of different units in the averaging plan. Total mass of allowable NO_x emissions in tons for a unit $EM_{all(i)} =$ as determined in subsection (f)(2) of this Section.

For each unit in the averaging plan, and each fuel used by such unit, determine actual and allowable NO_X emissions using the following equations:

1) Actual emissions must be determined as follows:

When emission limits are prescribed in lb/mmBtu, $EM_{act(i)} = E_{act(i)} \times H_i/2000$

When emission limits are prescribed in lb/ton of processed product,

 $\underline{EM_{act(i)}} \hspace{2cm} = \hspace{2cm} \underline{E_{act(i)} \hspace{1mm} x \hspace{1mm} P_{\underline{i}} / 2000}$

2) Allowable emissions must be determined as follows:

When emission limits are prescribed in lb/mmBtu,

 $\underline{EM_{all(i)}}$ = $\underline{E_{all(i)}} \times \underline{H_i/2000}$

When emission limits are prescribed in lb/ton of processed product,

 $\underline{EM_{all(i)}}$ = $\underline{E_{all(i)}} \times \underline{P_i/2000}$

Where:

 $\underline{EM}_{act(i)}$ = $\underline{Total\ mass\ of\ actual\ NO_X\ emissions\ in\ tons\ for\ a}$

unit.

 $\underline{EM}_{all(i)} = \underline{Total \ mass \ of \ allowable \ NO_X \ emissions \ in \ tons \ for}$

a unit.

 \underline{E}_{act} = Actual NO_X emission rate (lbs/mmBtu or lbs/ton of

product) as determined by a performance test, a continuous emissions monitoring system, or an alternative method approved by the Agency.

 $\underline{E_{all}}$ = Allowable NO_X emission rate (lbs/mmBtu or lbs/ton

of product) as provided in Section 217.164, 217.184, 217.204, 217.224, 217.244, or 217.344, as applicable. For an affected industrial boiler subject to Subpart E of this Part, or process heater subject to Subpart F of this Part, with a rated heat input capacity less than or equal to 100 mmBtu/hr demonstrating compliance through an emissions averaging plan, the allowable NOx emission rate is to be determined from a performance test after such boiler or heater has undergone combustion tuning. For all other units in an emissions averaging plan, an uncontrolled NOx emission rate from USEPA's AP-42, as incorporated by reference in Section 217.104, or an uncontrolled NOx emission rate as determined by an alternative method approved by the Agency, will be used.

H = Heat input (mmBtu/ozone season or mmBtu/year)

calculated from fuel flow meter and the heating

value of the fuel used.

<u>P</u> = <u>weight in tons of processed product.</u>

g) An owner or operator of an emission unit subject to Subpart Q of this Part that is located in either one of the areas set forth under Section 217.150(a)(1)(A)(i) or (ii) that is complying through an emissions averaging plan under this Section must

comply with the applicable provisions for determining actual and allowable emissions under Section 217.390, the testing and monitoring requirements under Section 217.394, and the recordkeeping and reporting requirements under Section 217.396.

- h) The owner or operator of an emission unit located at a petroleum refinery who is demonstrating compliance with an applicable Subpart through an emissions averaging plan under this Section may exclude from the calculation demonstrating compliance those time periods when an emission unit included in the emissions averaging plan is shut down for a maintenance turnaround, provided that such owner or operator notify the Agency in writing at least 30 days in advance of the shutdown of the emission unit for the maintenance turnaround and the shutdown of the emission unit does not exceed 45 days per ozone season or calendar year and NO_x pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance turnaround.
- i) The owner or operator of an emission unit that combusts a combination of coke oven gas and other gaseous fuels and that is located at a source that manufactures iron and steel who is demonstrating compliance with an applicable Subpart through an emissions averaging plan under this Section may exclude from the calculation demonstrating compliance those time periods when the coke oven gas desulfurization unit included in the emissions averaging plan is shut down for maintenance, provided that such owner or operator notify the Agency in writing at least 30 days in advance of the shutdown of the coke oven gas desulfurization unit for maintenance and such shutdown does not exceed 35 days per ozone season or calendar year and NO_x pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance period.
- The owner or operator of an emission unit located at a petroleum refinery who is demonstrating compliance with an applicable Subpart through an emissions averaging plan under this Section may exclude from the calculation demonstrating compliance those time periods when NO_x pollution control equipment that controls one or more emission units included in the emissions averaging plan is shut down for a maintenance turnaround, provided that: 1) the owner or operator notify the Agency in writing, at least 30 days in advance of the shutdown, of the NO_x pollution control equipment for the maintenance turnaround; 2) the shutdown of the NO_x pollution control equipment does not exceed 45 days per ozone season or calendar year; and 3) except for those emission units vented to the NO_x pollution control equipment undergoing the maintenance turnaround, NO_x pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance turnaround.

(Source: Added at 33 Ill. Reg	g, effective)

SUBPART E: INDUSTRIAL BOILERS

Section 217.160 Applicability

- a) The provisions of Subpart D of this Part and this Subpart apply to all industrial boilers located at sources subject to this Subpart pursuant to Section 217.150, except as provided in subsections (b) and (c) of this Section.
- b) The provisions of this Subpart do not apply to boilers serving a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale, if such boilers meet the applicability criteria under Subpart M of this Part.
- <u>The provisions of this Subpart do not apply to fluidized catalytic cracking units, their regenerator and associated CO boiler or boilers and CO furnace or furnaces where present, if such units are located at a petroleum refinery and such units are required to meet emission limits or control requirements for NO_x as provided for in an enforceable order.</u>

(Source: Added at 33	Ill. Reg,	effective)
----------------------	-----------	------------

Section 217.162 Exemptions

Notwithstanding Section 217.160 of this Subpart, the provisions of this Subpart do not apply to an industrial boiler operating under a federally enforceable limit of NO_x emissions from such boiler to less than 15 tons per year and less than five tons per ozone season.

(Source: A	Added at 33	III. Reg.	, effective	

Section 217.164 Emissions Limitations

a) Except as provided for under Section 217.152, on and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any industrial boiler to exceed the following limitations. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

<u>Fuel</u>		Emission Unit Type and Rated Heat Input Capacity (mmmBtu/hr)	NO _x Emissions Limitation (lb/mmmBtu or Requirement
	Natural Gas or Other Gaseous Fuels	Industrial boiler greater than 100	0.08
		Industrial boiler less than equal to 100	Combustion tuning
	Distillate Fuel Oil	Industrial boiler greater	<u>0.10</u>

than 100

<u>Industrial boiler less than</u> <u>Combustion tuning</u>

or equal to 100

Other Liquid Fuels Industrial boiler greater 0.15

than 100

Industrial boiler less than Combustion tuning

or equal to 100

Solid Fuel Industrial boiler greater 0.12

than 100, circulating fluidized bed combustor

<u>Industrial boiler greater</u> 0.18

than 250

<u>Industrial boiler greater</u> 0.25

than 100 but less than or

equal to 250

<u>Industrial boiler less than</u> <u>Combustion tuning</u>

or equal to 100

b) For an industrial boiler combusting a combination of natural gas, coke oven gas, and blast furnace gas, the NO_x emissions limitation shall be calculated using the following equation:

 $\underline{NO_x}$ emissions limitation for period in lb/MMBtu= $(NO_{xNG} * Btu_{NG} +$

 $\underline{NO_{xCOG}}*\underline{Btu_{COG}}+\underline{NO_{xBFG}}*\underline{Btu_{BFG}})/(\underline{Btu_{NG}}+\underline{Btu_{COG}}+\underline{Btu_{BFG}})$

Where:

 NO_{xNG} = 0.084 lb/MMBtu for natural gas

 $\underline{Btu_{NG}}$ = the heat input of natural gas in Btu over that period

 $\underline{NO}_{xCOG} \equiv \underline{0.144 \text{ lb/MMBtu for coke oven gas}}$

 Btu_{COG} = the heat input of coke oven gas in Btu over that period

 $NO_{xBFG} = 0.0288 \text{ lb/MMBtu for blast furnace gas}$

	$\underline{Btu_{BFG}}$ = the heat input of blast furnace gas in Btu over that period
(Source	ee: Added at 33 Ill. Reg, effective)
Section 217.1	65 Combination of Fuels
combination of	operator of an industrial boiler subject to this Subpart and operated with any of fuels must comply with a heat input weighted average emissions limitation to ompliance with Section 217.164.
(Source	e: Added at 33 Ill. Reg, effective)
Section 217.1	66 Methods and Procedures for Combustion Tuning
Section 217.1 combustion tu who has succe fuel or fuels the	operator of an industrial boiler subject to the combustion tuning requirements of 64 must have combustion tuning performed on the boiler at least annually. The ming must be performed by an employee of the owner or operator or a contractor essfully completed a training course on the combustion tuning of boilers firing the mat are fired in the boiler. The owner or operator must maintain the following must be made available to the Agency upon request:
<u>a)</u>	The date the combustion tuning was performed;
<u>b)</u>	The name, title, and affiliation of the person who performed the combustion tuning;
<u>c)</u>	Documentation demonstrating the provider of the combustion tuning training course, the dates the training course was taken, and proof of successful completion of the training course;
<u>d)</u>	Tune-up procedure followed and checklist of items (such as burners, flame conditions, air supply, scaling on heating surface, etc.) inspected prior to the actual tune-up; and
<u>e)</u>	Operating parameters recorded at the start and at conclusion of combustion tuning.
(Source	ee: Added at 33 Ill. Reg, effective)
	SUBPART F: PROCESS HEATERS

Section 217.180 Applicability

The provisions of Subpart D of this Part and this Subpart apply to all process heaters located at sources subject to this Subpart pursuant to Section 217.150.

	(Source: Added at 33	Ill. Reg. ,	effective	
--	----------------------	-------------	-----------	--

Section 217.182 Exemptions

Notwithstanding Section 217.180, the provisions of this Subpart do not apply to a process heater operating under a federally enforceable limit of NO_x emissions from such heater to less than 15 tons per year and less than five tons per ozone season.

	(Source: Added at 33 Ill.	Reg	effective	
--	---------------------------	-----	-----------	--

Section 217.184 Emissions Limitations

Except as provided for under Section 217.152, on and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any process heater to exceed the following limitations. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

<u>Fuel</u>	Emission Unit Type andRated Heat Input Capacity(mmmBtu/hr)	NO _x Emissions Limitation (lb/mmmBtu or Requirement
Natural Gas or Other Gaseous Fuels	Process heater greater than 100	0.08
	Process heater less than or equal to 100	Combustion tuning
Residual Fuel Oil	Process heater greater than 100, natural draft	0.10
	Process heater greater than 100, mechanical draft	0.15
	Process heater less than or equal to 100	Combustion tuning
Other Liquid Fuels	Process heater greater than 100, natural draft	<u>0.05</u>
	Process heater greater than 100, mechanical draft	0.08
(Source: Added at 33	Ill. Reg, effective)

Section 217.185 Combination of Fuels

The owner or oper	ator of a process heater subject to this Subpart and operated with any	
	ls must comply with a heat input weighted average emissions limitation to	
	iance with Section 217.184.	
*		
(Source: Ac	lded at 33 Ill. Reg, effective)	
Section 217.186 N	Methods and Procedures for Combustion Tuning	
Section 217.184 m combustion tuning who has successful fuel or fuels that ar	ator of a process heater subject to the combustion tuning requirements of sust have combustion tuning performed on the heater at least annually. The must be performed by an employee of the owner or operator or a contractor ly completed a training course on the combustion tuning of heaters firing the e fired in the heater. The owner or operator must maintain the following e made available to the Agency upon request:	
<u>a)</u>	The date the combustion tuning was performed;	
<u>b)</u>	The name, title, and affiliation of the person who performed the combustion tuning:	
<u>c)</u>	Documentation demonstrating the provider of the combustion tuning training course, the dates the training course was taken, and proof of successful completion of the training course;	
<u>d)</u>	Tune-up procedure followed and checklist of items (such as burners, flame conditions, air supply, scaling on heating surface, etc.) inspected prior to the actual tune-up; and	
<u>e)</u>	Operating parameters recorded at the start and at conclusion of combustion tuning.	
(Source: Added at 33 Ill. Reg, effective)		
	SUBPART G: GLASS MELTING FURNACES	
Section 217.200 A	<u>applicability</u>	
	Subpart D of this Part and this Subpart apply to all glass melting furnaces subject to this Subpart pursuant to Section 217.150.	
(Source: Ac	lded at 33 Ill. Reg, effective)	

Section 217.202 Exemptions

Notwithstanding Section 217.200, the provisions of this Subpart do not apply to a glass melting furnace operating under a federally enforceable limit of NO_x emissions from such furnace to less than 15 tons per year and less than five tons per ozone season.

(Source: Added at 33 II	l. Reg. ,	effective	

Section 217.204 Emissions Limitations

a) On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any glass melting furnace to exceed the following limitations. Compliance must be demonstrated with the emissions limitation on an ozone season and annual basis.

<u>Product</u>	Emission Unit Type	Nox Emissions Limitation (lb/ton glass produced)
Container Glass	Glass melting furnace	<u>5.0</u>
Flat Glass	Glass melting furnace	<u>7.9</u>
Other Glass	Glass melting furnace	<u>11.0</u>

b) The emissions during glass melting furnace startup (not to exceed 70 days) or furnace idling (operation at less than 35% of furnace capacity) shall be excluded from calculations for the purpose of demonstrating compliance with the seasonal and annual emissions limitations under this Section, provided that the owner or operator, at all times, including periods of startup and idling, to the extent practicable, maintain and operate any affected emission unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. The owner or operator of a glass melting furnace must maintain records that include the date, time, and duration of any startup or idling in the operation of the glass melting furnace.

(Source: Added at 33 Ill. Reg. _____, effective ______)

SUBPART H: CEMENT AND LIME KILNS

Section 217.220 Applicability

- a) Notwithstanding Subpart T of this Part, the provisions of Subpart D of this Part and this Subpart apply to all cement kilns located at sources subject to this Subpart pursuant to Section 217.150.
- b) The provisions of Subpart C of this Part and this Subpart apply to all lime kilns located at sources subject to this Subpart pursuant to Section 217.150.

(Source	ce: Added at 33 Ill.	Reg, effective)		
Section 217.2	Section 217.222 Exemptions				
Notwithstanding Section 217.220, the provisions of this Subpart do not apply to a cement kiln or lime kiln operating under a federally enforceable limit of NO_x emissions from such kiln to less than 15 tons per year and less than five tons per ozone season.					
		Reg, effective)		
Section 217.2	Emissions Lim	<u>itations</u>			
<u>a)</u>	into the atmospher	e from any cement kiln to debe demonstrated with the ap	cause or allow emissions of NO _x exceed the following limitations. pplicable emissions limitation on an		
	Emission	Unit Type	NO _x Emissions Limitation (lb/ton clinker produced)		
	Long dry	<u>kiln</u>	<u>5.1</u>		
	Short dry	<u>kiln</u>	<u>5.1</u>		
	<u>Preheater</u>	<u>kiln</u>	<u>3.8</u>		
	<u>Preheater</u>	precalciner kiln	2.8		
<u>b)</u>	into the atmospher	e from any lime kiln to exc be demonstrated with the a	cause or allow emissions of NO _x eeed the following limitations. pplicable emissions limitation on an		
	<u>Fuel</u>	Emission Unit Type	Nox Emissions Limitation (lb/ton lime produced)		
	Gas	Rotary kiln	<u>2.2</u>		
	<u>Coal</u>	Rotary kiln	<u>2.5</u>		
(Source: Added at 33 Ill. Reg, effective)					

SUBPART I: IRON AND STEEL AND ALUMINUM MANUFACTURING

Section 217.240 Applicability

- <u>a)</u> The provisions of Subpart D of this Part and this Subpart apply to all reheat furnaces, annealing furnaces, and galvanizing furnaces used in iron and steel making located at sources subject to this Subpart pursuant to Section 217.150.
- b) The provisions of Subpart D of this Part and this Subpart apply to all reverberatory furnaces and crucible furnaces used in aluminum melting located at sources subject to this Subpart pursuant to Section 217.150.

(Double, Fluded at 33 III. Reg. , Checkive	(Source:	Added at 33	Ill. Reg.	, effective	
--	----------	-------------	-----------	-------------	--

Section 217.242 Exemptions

Notwithstanding Section 217.240, the provisions of this Subpart do not apply to an iron and steel reheat furnace, annealing furnace, or galvanizing furnace, or aluminum reverberatory furnace or crucible furnace operating under a federally enforceable limit of NO_x emissions from such furnace to less than 15 tons per year and less than five tons per ozone season.

(Source: Added at 33 Ill. Reg.	, effective))

Section 217.244 Emissions Limitations

a) On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any reheat furnace annealing furnace, or galvanizing furnace used in iron and steel making to exceed the following limitations.

Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

Emission Unit Type	NO _x Emissions Limitation (lb/mmBtu)
Reheat furnace, regenerative	0.18
Reheat recuperative, combusting natural gas	0.09
Reheat furnace, recuperative, combusting a combination of natural gas and coke oven gas	0.142
Reheat furnace, cold-air	0.03
Annealing furnace, regenerative	0.38
Annealing furnace, recuperative	0.16
Annealing furnace, cold-air	0.07

Galvanizing furnace, regenerative	<u>0.46</u>
Galvanizing furnace, cuperative	<u>0.16</u>
Galvanizing furnace, cold-air	0.06

b) On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any reverberatory furnace or crucible furnace used in aluminum melting to exceed the following limitations. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

	Emission Unit Type	NO _x Emissions Limitation (lb/mmmBtu)
	Reverberatory furnace	0.08
	Crucible furnace	<u>0.16</u>
(Source: Added at 33 III. Reg	, effective)

SUBPART M: ELECTRICAL GENERATING UNITS

Section 217.340 Applicability

Notwithstanding Subpart V or W of this Part, the provisions of Subpart D of this Part and this Subpart apply to any fossil fuel-fired stationary boiler serving at any time a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale, excluding any units listed in Appendix D of this Part, located at sources subject to this Subpart pursuant to Section 217.150.

(Source: Added at 33 Ill. Reg., effective)
---	--	---

Section 217.342 Exemptions

- a) Notwithstanding Section 217.340, the provisions of this Subpart do not apply to a fossil fuel-fired stationary boiler operating under a federally enforceable limit of NO_x emissions from such boiler to less than 15 tons per year and less than five tons per ozone season.
- b) Notwithstanding Section 217.340, the provisions of this Subpart do not apply to a coal-fired stationary boiler that commenced operation before January 1, 2008, that is complying with Part 225.Subpart B through the multi-pollutant standard-or the combined pollutant standard.

(Source: Added at 33 Ill. Reg, effecti	ve)
--	------

Section 217.344 Emissions Limitations

On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any fossil fuel-fired stationary boiler to exceed the following limitations. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

<u>Fuel</u>	Emission Unit Type	NO _x Emissions Limitation (lb/mmmBtu)
Solid	Boiler	0.12
Natural gas	Boiler	<u>0.06</u>
<u>Liquid</u>	Boiler that commenced operation before January 1, 2008.	0.10
	Boiler that commenced Operation on or after January 1, 2008	0.08
(Source: Added at 33	3 Ill. Reg, effective)

Section 217.345 Combination of Fuels

The owner or operator of a fossil fuel-fired stationary boiler subject to this Subpart and operated with any combination of fuels must comply with a heat input weighted average emissions limitation to demonstrate compliance with Section 217.344.

(Source:	Added at 33 Ill.	Reg	. effective	`
(Dource.	Added at 33 III.	IXCE.	. CITCCIIVC	

<u>Section 217.APPENDIX H: Compliance Dates for Certain Emission Units at Petroleum Refineries</u>

ExxonMobil Oil Corporation (Facility ID 197800AAA)

<u>Point</u>	Emission Unit Description	Compliance Date
<u>0019</u>	Crude Vacuum Heater (13-B-2)	<u>December 31,2014</u>
<u>0038</u>	Alky Iso-Stripper Reboiler (7-B-1)	<u>December 31,2014</u>
<u>0033</u>	CHD Charge Heater (3-B-1)	<u>December 31,2014</u>
0034	CHD Stripper Reboiler (3-B-2)	<u>December 31,2014</u>

0021	Coker East Charge Heater (16-B-1A)	<u>December 31,2014</u>
0021	Coker East Charge Heater (16-B-1B)	<u>December 31,2014</u>
<u>0018</u>	Crude Atmospheric Heater (1-B-1A)	<u>December 31,2014</u>
0018	Crude Atmospheric Heater (1-B-1B)	December 31,2014

ConocoPhillips Company Wood River Refinery (Facility ID 119090AAA)

Point	Emission Unit Description	Compliance Date
0017	BEU-HM-1	December 31, 2012
0018	BEU-HM-2	December 31, 2012
<u>0004</u>	CR-1 Feed Preheat, H-1	<u>December 31, 2012</u>
0005	CR-1 1st Interreactor Heater, H-2	<u>December 31, 2012</u>
<u>0009</u>	CR-1 3rd Interreactor Heater, H-7	<u>December 31, 2012</u>
<u>0091</u>	<u>CR-3 Charge Heater</u>	<u>December 31, 2012</u>
<u>0092</u>	CR-3 1st Reheat Heater, H-5	<u>December 31, 2012</u>
<u>0082</u>	Boiler 17	<u>December 31, 2012</u>
<u>0080</u>	Boiler 15	<u>December 31, 2012</u>
<u>0073</u>	Alky HM-2 Heater	<u>December 31, 2012</u>
<u>0662</u>	VF-4 Charge Heater, H-28	<u>December 31, 2012</u>
<u>0664</u>	DU-4 Charge Heater, H-24	<u>December 31, 2014</u>
<u>0617</u>	DCU Charge Heater, H-20	<u>December 31, 2014</u>
<u>0014</u>	HCU Fractionator Reboil, H-3	<u>December 31, 2016</u>
<u>0024</u>	DU-1 Primary Heater South, F-301	<u>December 31, 2016</u>
<u>0025</u>	DU-1 Secondary Heater North, F-302	<u>December 31, 2016</u>
<u>0081</u>	Boiler 16	<u>December 31, 2016</u>
0083	Boiler 18	<u>December 31, 2016</u>
<u>0095</u>	DHT Charge Heater	<u>December 31, 2016</u>
0028	DU-2 Lube Crude Heater F-200	<u>December 31, 2016</u>
<u>0029</u>	DU-2 Mixed Crude Heater West, F 202	<u>December 31, 2016</u>
<u>0030</u>	DU-2 Mixed Crude Heater East, F-203	<u>December 31, 2016</u>
<u>0084</u>	CR-2 North Heater	<u>December 31, 2016</u>
<u>0661</u>	<u>CR-2 South Heater</u>	<u>December 31, 2016</u>

(Source: Added at 33 Ill. Reg. _____, effective _____)

IT IS SO ORDERED.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on August 20, 2009, by a vote of 5-0.

John T. Therriault, Assistant Clerk

Illinois Pollution Control Board