

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

- 1) Heading of the Part: Nitrogen Oxides Emissions
- 2) Code citation: 35 Ill. Adm. Code 217
- 3)

<u>Section Numbers:</u>	<u>Proposed Action:</u>
217.152	Amend
217.154	Amend
217.157	Amend
217.158	Amend
217.164	Amend
217.184	Amend
217.204	Amend
217.224	Amend
217.244	Amend
217.344	Amend
217.APPENDIX H	Amend
- 4) Statutory authority: Implementing Section 10, and authorized by Sections 27 and 28 of the Environmental Protection Act [415 ILCS 5/10, 27, 28]
- 5) A complete description of the subjects and issues involved: The proposal modifies the date for compliance with the requirements of various Subparts of 35 Ill. Adm. Code 217, Nitrogen Oxides Emissions, which contain provisions relating to the control of nitrogen oxides emissions from various source categories, including emission units within these source categories such as industrial boilers, process heaters, glass melting furnaces, cement kilns, lime kilns, furnaces used in steel making and aluminum melting, and fossil-fuel fired stationary boilers. This rulemaking proposal has been prepared to extend the compliance date for the requirements under Subparts D, E, F, G, H, I, and M of Part 217 from January 1, 2012, to January 1, 2015, and as such, satisfy Illinois' obligation to submit a State Implementation Plan to address the requirements under Sections 172 and 182 of the Clean Air Act for major stationary sources of Nitrogen Oxides (NO_x) in areas designated as nonattainment with respect to the National Ambient Air Quality Standards. The proposal also amends 35 Ill. Adm. Code 217.Appendix H by deleting ExxonMobil Oil Corporation and its units and the units of ConocoPhillips Company Wood River Refinery that include compliance dates before January 1, 2015.
- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: None

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- 7) Will this rulemaking replace any emergency rulemaking currently in effect? No
- 8) Does this rulemaking contain an automatic repeal date? No
- 9) Does this rulemaking contain incorporations by reference? No
- 10) Are there any other proposed rulemakings pending on this Part? Yes

<u>Section Numbers:</u>	<u>Proposed Action:</u>	<u>Illinois Register Citation:</u>
217.152	Amend	34 Ill. Reg. 19830; December 27, 2010
217.388	Amend	34 Ill. Reg. 17513; November 19, 2010

- 11) Statement of statewide policy objectives: This proposed rulemaking does not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3(b)].
- 12) Time, place and manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of this publication. Comments should reference docket R11-24 and be addressed to:

John Therriault
Clerk's Office
Illinois Pollution Control Board
James R. Thompson Center, Suite 11-500
100 W. Randolph St.
Chicago, IL 60601

Interested persons may obtain copies of the Board's opinion and order by downloading them from the Board's Web site at www.ipcb.state.il.us. or by calling the Clerk's office at 312-814-3620. For more information, contact Hearing Officer Daniel Robertson at 312-814-6931 or email robertsd@ipcb.state.il.us.

- 13) Initial regulatory flexibility analysis:
- A) Types of small businesses, small municipalities, and not-for-profit corporations affected: The proposed regulations are generally expected to affect all sources that are located in the Chicago-Gary-Lake County, IL-IN and the St. Louis, MO-IL nonattainment areas that emit or have the potential to emit NO_x in an amount

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equal to or greater than 100 tons per year and 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 within such sources that emit NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than 5 tons per ozone season and subject to the provisions of the regulations.

- B) Reporting, bookkeeping or other procedures required for compliance: The proposed amendments only seek to extend the compliance date for NO_x requirements for a number of source categories and do not impose any additional requirements upon affected sources outside of those reporting, bookkeeping or other procedures already required.
- C) Types of professional skills necessary for compliance: The proposed amendments do not make any substantive changes to the rule language other than extending a compliance date and therefore the amendments do not impose any additional requirements upon affected sources other than those professional skills already required.
- 14) Regulatory Agenda on which this rulemaking was summarized: This rulemaking was not included in either of the two most recent regulatory agendas, because the need for this rulemaking was not made apparent until recently when it was recognized that the United States Environmental Protection Agency's delay in adopting the 8-hour ozone standard revision proposed in 2010 results in a situation where the existing NO_x Reasonably Available Control Technology regulations impose compliance requirements upon the regulated community prior to when they will be necessary under the Clean Air Act.

The full text of the Proposed Amendments begins on the next page:

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

Section
217.141 Existing Emission Units in Major Metropolitan Areas

SUBPART D: NO_x GENERAL REQUIREMENTS

Section
217.150 Applicability
217.152 Compliance Date
217.154 Performance Testing
217.155 Initial Compliance Certification
217.156 Recordkeeping and Reporting
217.157 Testing and Monitoring
217.158 Emissions Averaging Plans

SUBPART E: INDUSTRIAL BOILERS

Section
217.160 Applicability
217.162 Exemptions
217.164 Emissions Limitations
217.165 Combination of Fuels
217.166 Methods and Procedures for Combustion Tuning

SUBPART F: PROCESS HEATERS

Section
217.180 Applicability
217.182 Exemptions
217.184 Emissions Limitations
217.185 Combination of Fuels
217.186 Methods and Procedures for Combustion Tuning

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SUBPART G: GLASS MELTING FURNANCES

Section

217.200 Applicability
217.202 Exemptions
217.204 Emissions Limitations

SUBPART H: CEMENT AND LIME KILNS

Section

217.220 Applicability
217.222 Exemptions
217.224 Emissions Limitations

SUBPART I: IRON AND STEEL AND ALUMINUM MANUFACTURING

Section

217.240 Applicability
217.242 Exemptions
217.244 Emissions Limitations

SUBPART K: PROCESS EMISSION SOURCES

Section

217.301 Industrial Processes

SUBPART M: ELECTRICAL GENERATING UNITS

Section

217.340 Applicability
217.342 Exemptions
217.344 Emissions Limitations
217.345 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: NOx CONTROL AND TRADING PROGRAM FOR
SPECIFIED NOx GENERATING UNITS

Section

217.450 Purpose
217.452 Severability
217.454 Applicability
217.456 Compliance Requirements
217.458 Permitting Requirements
217.460 Subpart U NOx Trading Budget
217.462 Methodology for Obtaining NOx Allocations
217.464 Methodology for Determining NOx Allowances from the New Source Set-
Aside
217.466 NOx 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 NOx 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 NOx Averaging
217.710 Monitoring
217.712 Reporting and Recordkeeping

SUBPART W: NOx TRADING PROGRAM FOR
ELECTRICAL GENERATING UNITS

Section

217.750 Purpose
217.751 Sunset Provisions
217.752 Severability
217.754 Applicability
217.756 Compliance Requirements
217.758 Permitting Requirements
217.760 NOx Trading Budget
217.762 Methodology for Calculating NOx Allocations for Budget Electrical
Generating Units (EGUs)
217.764 NOx 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 NOx Trading Program
217.780 Opt-In Units: Change in Regulatory Status

217.782 Allowance Allocations to Budget Opt-In Units

SUBPART X: VOLUNTARY NOx EMISSIONS REDUCTION PROGRAM

Section

217.800 Purpose
217.805 Emission Unit Eligibility
217.810 Participation Requirements
217.815 NOx Emission Reductions and the Subpart X NOx Trading Budget
217.820 Baseline Emissions Determination
217.825 Calculation of Creditable NOx Emission Reductions
217.830 Limitations on NOx Emission Reductions
217.835 NOx Emission Reduction Proposal
217.840 Agency Action
217.845 Emissions Determination Methods
217.850 Emissions Monitoring
217.855 Reporting
217.860 Recordkeeping
217.865 Enforcement

217.APPENDIX A Rule into Section Table
217.APPENDIX B Section into Rule Table
217.APPENDIX C Compliance Dates
217.APPENDIX D Non-Electrical Generating Units
217.APPENDIX E Large Non-Electrical Generating Units
217.APPENDIX F Allowances for Electrical Generating Units
217.APPENDIX G Existing Reciprocating Internal Combustion Engines Affected by the NOx SIP Call
217.APPENDIX H Compliance Dates for Certain Emissions Units at Petroleum Refineries

Authority**AUTHORITY**: Implementing Sections 9.9 and 10 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/9.9, 10, 27 and 28.5 (2004)].

Source**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. ~~14254~~, 14271, effective September 25, 2007; amended in R07-19 at 33 Ill. Reg. 11999, effective August 6, 2009; amended in R08-19 at 33 Ill. Reg. 13345, effective August 31, 2009; amended in R09-20 at 33 Ill. Reg. 15754, effective November 2, 2009; amended in R11-24 at 35 Ill. Reg. _____, effective _____.

SUBPART D: NOx GENERAL REQUIREMENTS

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, ~~2015~~2012-2015.

b) 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.

c) Notwithstanding subsection (a) of this Section, the owner or operator of emission 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, ~~2015~~~~2012~~,2015, 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: Amended at 35 Ill. Reg. _____, effective _____)

Section 217.154 Performance Testing

a) Performance testing of NOx emissions for emission units constructed on or before July 1, ~~2014~~~~2011~~,2014, 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.

b) Performance testing of NOx emissions for emission units for which construction or modification occurs after July 1, ~~2014~~~~2011~~,2014, and that are subject to emissions limitations under Subpart E, F, G, H, or I of this Part must be conducted within 60 days after 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.

c) 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: Amended at 35 Ill. Reg. _____, effective _____)

Section 217.157 Testing and Monitoring

a) Industrial Boilers and Process Heaters

1) 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 must install, calibrate, maintain, and operate a continuous emissions monitoring system on the emission unit for the measurement of NOx 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 that 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 NOx emissions from the industrial boiler are less than 70% of the applicable emissions limitation under Section 217.164. In the event the owner or operator is unable to meet the requirements of this exception, a continuous emissions monitoring system is required within 12 months after that event, or by January 1, ~~2015~~December 31, 2012, 2015, whichever is later.

2) 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 NOx 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.

3) 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 NOx 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.

A) 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 after receipt of 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.

5) 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.

6) 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

1) 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 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.

2) 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.

3) 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 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.

4) 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.

5) 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 NOx 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.

c) Fossil Fuel-Fired Stationary Boilers. 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 NOx 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 applicable compliance date under Section 217.152 of this Subpart. ~~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.~~

f) 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 NOx 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: Amended at 35 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.

C) 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 NOx emissions on an annual basis than the actual NOx 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.

C) Units that are required to meet emission limits or control requirements for NOx 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, ~~2015~~2012-2015. 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).

c) 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).

f) The total mass of actual NOx emissions from the units listed in the emissions averaging plan must be equal to or less than the total mass of

allowable NOx emissions for those units for both the ozone season and calendar year. The following equation must be used to determine compliance:

Where:

=Total sum of the actual NOx mass emissions from units included in the averaging plan for each fuel used (tons per ozone season and year). =Total sum of the allowable NOx mass emissions from units included in the averaging plan for each fuel used (tons per ozone season and year). =Total mass of actual NOx emissions in tons for a unit as determined in subsection (f)(1) of this Section. i=Subscript denoting an individual unit. j=Subscript denoting the fuel type used. k=Number of different fuel types. n=Number of different units in the averaging plan. =Total mass of allowable NOx emissions in tons for a unit 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 NOx emissions using the following equations:

1) Actual emissions must be determined as follows:

When emission limits are prescribed in lb/mmBtu,

=

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

=

2) Allowable emissions must be determined as follows:

When emission limits are prescribed in lb/mmBtu,

=

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

=

Where:

=Total mass of actual NOx emissions in tons for a unit. =Total mass of allowable NOx emissions in tons for a unit. =Actual NOx 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. =Allowable NOx 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. P=weight in tons of processed product.

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 NOx 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 NOx pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance period.

j) 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 NOx 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 NOx pollution control equipment for the maintenance turnaround;

2) the shutdown of the NOx pollution control equipment does not exceed 45 days per ozone season or calendar year; and

3) except for those emission units vented to the NOx pollution control equipment undergoing the maintenance turnaround, NOx pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance turnaround.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART E: INDUSTRIAL BOILERS

Section 217.164 Emissions Limitations

a) Except as provided for under Section 217.152, on and after January 1, ~~2015~~~~2012~~,2015, no person shall cause or allow emissions of NOx 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.

Fuel Emission Unit Type and Rated Heat Input Capacity (mmBtu/hr) Nox Emissions Limitation (lb/mmBtu) or Requirement

Natural Gas or Other Gaseous Fuels

Industrial boiler greater than 100

0.08 Industrial boiler less than or equal to 100 Combustion tuning Distillate Fuel

Oil Industrial boiler greater than 1000.10 Industrial boiler less than or equal to

100 Combustion tuning Other Liquid Fuels Industrial boiler greater than 1000.15

Industrial boiler less than or equal to 100 Combustion tuning Solid Fuel Industrial

boiler greater than 100, circulating fluidized bed combustor 0.12 Industrial

boiler greater than 2500.18 Industrial boiler greater than 100 but less than or

equal to 2500.25 Industrial boiler less than or equal to 100 Combustion tuning

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

NOx emissions limitation for period in lb/mmBtu =

Where:

= 0.084 lb/mmBtu for natural gas = the heat input of natural gas in Btu over that

period = 0.144 lb/mmBtu for coke oven gas = the heat input of coke oven gas in Btu

over that period = 0.0288 lb/mmBtu for blast furnace gas = the heat input of blast

furnace gas in Btu over that period

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART F: PROCESS HEATERS

Section 217.184 Emissions Limitations

Except as provided for under Section 217.152, on or after January 1, ~~2015~~~~2012~~,2015, no person shall cause or allow emissions of NOx 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.

Fuel Emission Unit Type and Rated Heat Input Capacity (mmBtu/hr) Nox Emissions Limitation (lb/mmBtu) 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 0.05 Process heater greater than 100, mechanical draft 0.08 Process heater

less than or equal to 100 Combustion tuning

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART G: GLASS MELTING FURNACES

Section 217.204 Emissions Limitations

a) On and after January 1, ~~2015~~~~2012~~,2015, no person shall cause or allow emissions of NOx 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.

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

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: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART H: CEMENT AND LIME KILNS

Section 217.224 Emissions Limitations

a) On and after January 1, ~~2015~~~~2012~~,2015, no person shall cause or allow emissions of NOx into the atmosphere from any cement kiln to exceed the following limitations. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

Emission Unit Type	Nox Emissions Limitation (lb/ton clinker produced)
Long dry kiln	5.1
Short dry kiln	5.1
Preheater kiln	3.8
Preheater/precalciner kiln	2.8

b) On and after January 1, ~~2015~~~~2012~~,2015, no person shall cause or allow emissions of NOx into the atmosphere from any lime kiln to exceed the following limitations. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

Fuel	Emission Unit Type	Nox Emissions Limitation (lb/ton lime produced)
Gas	Rotary kiln	2.2
Coal	Rotary kiln	2.5

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART I: IRON AND STEEL AND ALUMINUM MANUFACTURING

Section 217.244 Emissions Limitations

a) On and after January 1, ~~2015~~~~2012~~,2015, no person shall cause or allow emissions of NOx 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	Nox Emissions Limitation (lb/mmBtu)
Reheat furnace, regenerative	0.18
Reheat furnace, recuperative, combusting natural gas	0.09
Reheat furnace, recuperative, combusting a combination of natural gas and coke oven gas	0.14
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	0.46
Galvanizing furnace, recuperative	0.16
Galvanizing furnace, cold air	0.06

b) On and after January 1, ~~2015~~~~2012~~,2015, no person shall cause or allow emissions of NOx 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 Nox Emissions Limitation (lb/mmBtu) Reverberatory furnace 0.08 Crucible furnace 0.16

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART M: ELECTRICAL GENERATING UNITS

Section 217.344 Emissions Limitations

On and after January 1, ~~2015~~~~2012~~,2015, no person shall cause or allow emissions of NOx 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.

Fuel Emission Unit Type Nox Emissions Limitation (lb/mmBtu) Solid Boiler 0.12 Natural gas Boiler 0.06 Liquid Boiler that commenced operation before January 1, 2008 0.10 Boiler that commenced operation on or after January 1, 2008 0.08

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 217.APPENDIX H Compliance Dates for Certain Emission Units at Petroleum Refineries

~~ExxonMobil Oil Corporation (Facility ID 197800AAA)~~

~~Point Emission Unit Description Compliance Date 0019 Crude Vacuum Heater (13-B-2) December 31, 2014 0038 Alky Iso Stripper Reboiler (7-B-1) December 31, 2014 0033 CHD Charge Heater (3-B-1) December 31, 2014 0034 CHD Stripper Reboiler (3-B-2) December 31, 2014 0021 Coker East Charge Heater (16-B-1A) December 31, 2014 0021 Coker East Charge Heater (16-B-1B) December 31, 2014 0018 Crude Atmospheric Heater (1-B-1A) December 31, 2014 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 0004 CR-1 Feed Preheat, H-1 December 31, 2012 0005 CR-1 1st Interreactor Heater, H-2 December 31, 2012 0009 CR-1 3rd Interreactor Heater, H-7 December 31, 2012 0091 CR-3 Charge Heater December 31, 2012 0092 CR-3 1st Reheat Heater, H-5 December 31, 2012 0082 Boiler 17 December 31, 2012 0080 Boiler 15 December 31, 2012 0073 Alky HM-2 Heater December 31, 2012 0662 VF-4 Charge Heater, H-28 December 31, 2012 0664 DU-4 Charge Heater, H-24 December 31, 2014 0617 DCU Charge Heater, J-20 December 31, 2014 0014 0014 HCU Fractionator Reboil, H-3 December 31, 2016 0024 DU-1 Primary Heater South, F-301 December 31, 2016 0025 DU-1 Secondary Heater North, F-302 December 31, 2016 0081 Boiler 16 December 31, 2016 0083 Boiler 18 December 31, 2016 0095 DHT Charge Heater December 31, 2016 0028 DU-2 Lube Crude Heater, F-200 December 31, 2016 0029 DU-2 Mixed Crude Heater West, F-202 December 31, 2016 0030 DU-2 Mixed Crude Heater East, F-203 December 31, 2016 0084 CR-2 North Heater December 31, 2016 0661 CR-2 South Heater December 31, 2016~~

(Source: Amended at 35 Ill. Reg. _____, effective _____)

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~~ILLINOIS REGISTER~~

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

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Insertions	51
Deletions	27
Moved from	0
Moved to	0
Style change	0
Format changed	0
Total changes	78

1ST NOTICE VERSION

JCAR350217-1106770r01

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

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- Section
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SUBPART C: EXISTING FUEL COMBUSTION EMISSION UNITS

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- 217.141 Existing Emission Units in Major Metropolitan Areas

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- 217.152 Compliance Date
- 217.154 Performance Testing
- 217.155 Initial Compliance Certification
- 217.156 Recordkeeping and Reporting
- 217.157 Testing and Monitoring
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- 44 217.162 Exemptions
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- 46 217.165 Combination of Fuels
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SUBPART G: GLASS MELTING FURNANCES

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SUBPART H: CEMENT AND LIME KILNS

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134	217.476	Opt-In Process
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175 Section
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177 217.805 Emission Unit Eligibility
178 217.810 Participation Requirements
179 217.815 NO_x Emission Reductions and the Subpart X NO_x Trading Budget
180 217.820 Baseline Emissions Determination
181 217.825 Calculation of Creditable NO_x Emission Reductions
182 217.830 Limitations on NO_x Emission Reductions
183 217.835 NO_x Emission Reduction Proposal
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185 217.845 Emissions Determination Methods
186 217.850 Emissions Monitoring
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189 217.865 Enforcement
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191 217.APPENDIX A Rule into Section Table
192 217.APPENDIX B Section into Rule Table
193 217.APPENDIX C Compliance Dates
194 217.APPENDIX D Non-Electrical Generating Units
195 217.APPENDIX E Large Non-Electrical Generating Units
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197 217.APPENDIX G Existing Reciprocating Internal Combustion Engines Affected by the NO_x
198 SIP Call
199 217.APPENDIX H Compliance Dates for Certain Emissions Units at Petroleum Refineries
200

201 AUTHORITY: Implementing Sections 9.9 and 10 and authorized by Sections 27 and 28.5 of the
202 Environmental Protection Act [415 ILCS 5/9.9, 10, 27 and 28.5 (2004)].
203

204 SOURCE: Adopted as Chapter 2: Air Pollution, Rule 207: Nitrogen Oxides Emissions, R71-23,
205 4 PCB 191, April 13, 1972, filed and effective April 14, 1972; amended at 2 Ill. Reg. 17, p. 101,
206 effective April 13, 1978; codified at 7 Ill. Reg. 13609; amended in R01-9 at 25 Ill. Reg. 128,
207 effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4597, effective March 15, 2001;
208 amended in R01-16 and R01-17 at 25 Ill. Reg. 5914, effective April 17, 2001; amended in R07-
209 18 at 31 Ill. Reg. 14271, effective September 25, 2007; amended in R07-19 at 33 Ill. Reg. 11999,
210 effective August 6, 2009; amended in R08-19 at 33 Ill. Reg. 13345, effective August 31, 2009;
211 amended in R09-20 at 33 Ill. Reg. 15754, effective November 2, 2009; amended in R11-24 at 35
212 Ill. Reg. _____, effective _____.
213

214 SUBPART D: NO_x GENERAL REQUIREMENTS
215

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, ~~2015~~2012.
- b) 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 NO_x, 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.
- c) Notwithstanding subsection (a) of this Section, the owner or operator of emission 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, ~~2015~~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: Amended at 35 Ill. Reg. _____, effective _____)

Section 217.154 Performance Testing

- a) Performance testing of NO_x emissions for emission units constructed on or before July 1, ~~2014~~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.
- b) Performance testing of NO_x emissions for emission units for which construction or modification occurs after July 1, ~~2014~~2011, and that are subject to emissions

259 limitations under Subpart E, F, G, H, or I of this Part must be conducted within 60
 260 days after achieving maximum operating rate but no later than 180 days after
 261 initial startup of the new or modified emission unit, in accordance with Section
 262 217.157 of this Subpart. Except as provided for under Section 217.157(a)(4) and
 263 (e)(1), this subsection does not apply to owners and operators of emission units
 264 demonstrating compliance through a continuous emissions monitoring system,
 265 predictive emission monitoring system, or combustion tuning.
 266

- 267 c) Notification of the initial startup of an emission unit subject to subsection (b) of
 268 this Section must be provided to the Agency no later than 30 days after initial
 269 startup.
 270
- 271 d) The owner or operator of an emission unit subject to subsection (a) or (b) of this
 272 Section must notify the Agency of the scheduled date for the performance testing
 273 in writing at least 30 days before such date and five days before such date.
 274
- 275 e) If demonstrating compliance through an emissions averaging plan, at least 30
 276 days before changing the method of compliance, the owner or operator of an
 277 emission unit must submit a written notification to the Agency describing the new
 278 method of compliance, the reason for the change in the method of compliance,
 279 and the scheduled date for performance testing, if required. Upon changing the
 280 method of compliance, the owner or operator of an emission unit must submit to
 281 the Agency a revised compliance certification that meets the requirements of
 282 Section 217.155.
 283

284 (Source: Amended at 35 Ill. Reg. _____, effective _____)
 285

286 **Section 217.157 Testing and Monitoring**
 287

- 288 a) Industrial Boilers and Process Heaters
 289
- 290 1) The owner or operator of an industrial boiler subject to Subpart E of this
 291 Part with a rated heat input capacity greater than 250 mmBtu/hr must
 292 install, calibrate, maintain, and operate a continuous emissions monitoring
 293 system on the emission unit for the measurement of NO_x emissions
 294 discharged into the atmosphere in accordance with 40 CFR 75, as
 295 incorporated by reference in Section 217.104. However, the owner or
 296 operator of an industrial boiler subject to Subpart E of this Part with a
 297 rated heat input capacity greater than 250 mmBtu/hr that combusts blast
 298 furnace gas with up to 10% natural gas on an annual basis and located at a
 299 source that manufactures iron and steel is not required to install, calibrate,
 300 maintain, and operate a continuous emissions monitoring system on that
 301 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 the industrial boiler are less than 70% of the applicable emissions limitation under Section 217.164. In the event the owner or operator is unable to meet the requirements of this exception, a continuous emissions monitoring system is required within 12 months after that event, or by January 1, 2015~~December 31, 2012~~, whichever is later.

- 2) 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.
- 3) 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.
 - A) 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

344 procedures specified in this Section within 90 days after receipt of
 345 a notice to test from the Agency or USEPA.

346
 347 B) The owner or operator of an industrial boiler or process heater
 348 must have a performance test conducted using 40 CFR 60, subpart
 349 A and appendix A, Method 1, 2, 3, 4, 7E, or 19, as incorporated by
 350 reference in Section 217.104, or other alternative USEPA methods
 351 approved by the Agency. Each performance test must consist of
 352 three separate runs, each lasting a minimum of 60 minutes. NO_x
 353 emissions must be measured while the industrial boiler is operating
 354 at maximum operating capacity or while the process heater is
 355 operating at normal maximum load. If the industrial boiler or
 356 process heater has combusted more than one type of fuel in the
 357 prior year, a separate performance test is required for each fuel. If
 358 a combination of fuels is typically used, a performance test may be
 359 conducted, with Agency approval, on such combination of fuels
 360 typically used. Except as provided under subsection (e) of this
 361 Section, this subsection (a)(4)(B) does not apply if such owner or
 362 operator is demonstrating compliance with an emissions limitation
 363 through a continuous emissions monitoring system under
 364 subsection (a)(1), (a)(2), (a)(3), or (a)(5) of this Section.
 365

366 5) Instead of complying with the requirements of subsection (a)(4) of this
 367 Section, an owner or operator of an industrial boiler subject to Subpart E
 368 of this Part, or a process heater subject to Subpart F of this Part, with a
 369 rated heat input capacity less than or equal to 100 mmBtu/hr may install
 370 and operate a continuous emissions monitoring system on such emission
 371 unit in accordance with the applicable requirements of 40 CFR 60, subpart
 372 A and appendix B, Performance Specifications 2 and 3, and appendix F,
 373 Quality Assurance Procedures, as incorporated by reference in Section
 374 217.104. The continuous emissions monitoring system must be used to
 375 demonstrate compliance with the applicable emissions limitation or
 376 emissions averaging plan on an ozone season and annual basis.
 377

378 6) Notwithstanding subsection (a)(2) of this Section, the owner or operator of
 379 an auxiliary boiler subject to Subpart E of this Part with a rated heat input
 380 capacity less than or equal to 250 mmBtu/hr and a capacity factor of less
 381 than or equal to 20% is not required to install, calibrate, maintain, and
 382 operate a continuous emissions monitoring system on such boiler for the
 383 measurement of NO_x emissions discharged into the atmosphere, but must
 384 comply with the performance test requirements under subsection (a)(4) of
 385 this Section.
 386

- 387 b) Glass Melting Furnaces; Cement Kilns; Lime Kilns; Iron and Steel Reheat,
 388 Annealing, and Galvanizing Furnaces; and Aluminum Reverberatory and
 389 Crucible Furnaces
 390
- 391 1) An owner or operator of a glass melting furnace subject to Subpart G of
 392 this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron
 393 and steel reheat, annealing, or galvanizing furnace subject to Subpart I of
 394 this Part, or aluminum reverberatory or crucible furnace subject to Subpart
 395 I of this Part that has the potential to emit NO_x in an amount equal to or
 396 greater than one ton per day must install, calibrate, maintain, and operate a
 397 continuous emissions monitoring system on such emission unit for the
 398 measurement of NO_x emissions discharged into the atmosphere in
 399 accordance with 40 CFR 60, subpart A and appendix B, Performance
 400 Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as
 401 incorporated by reference in Section 217.104.
 402
- 403 2) An owner or operator of a glass melting furnace subject to Subpart G of
 404 this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron
 405 and steel reheat, annealing, or galvanizing furnace subject to Subpart I of
 406 this Part, or aluminum reverberatory or crucible furnace subject to Subpart
 407 I of this Part that has the potential to emit NO_x in an amount less than one
 408 ton per day must have an initial performance test conducted pursuant to
 409 subsection (b)(4) of this Section and Section 217.154.
 410
- 411 3) An owner or operator of a glass melting furnace subject to Subpart G of
 412 this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron
 413 and steel reheat, annealing, or galvanizing furnace subject to Subpart I of
 414 this Part, or aluminum reverberatory or crucible furnace subject to Subpart
 415 I of this Part that has the potential to emit NO_x in an amount less than one
 416 ton per day must have subsequent performance tests conducted pursuant to
 417 subsection (b)(4) of this Section as follows:
 418
- 419 A) For all glass melting furnaces subject to Subpart G of this Part,
 420 cement kilns or lime kilns subject to Subpart H of this Part, iron
 421 and steel reheat, annealing, or galvanizing furnace subject to
 422 Subpart I of this Part, or aluminum reverberatory or crucible
 423 furnaces subject to Subpart I of this Part, including all such units
 424 included in an emissions averaging plan, at least once every five
 425 years; and
 426
- 427 B) When, in the opinion of the Agency or USEPA, it is necessary to
 428 conduct testing to demonstrate compliance with Section 217.204,
 429 217.224, 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.

4) 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.

5) 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

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demonstrate compliance with the applicable emissions limitation or emissions averaging plan on an ozone season and annual basis.

- c) Fossil Fuel-Fired Stationary Boilers. 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 applicable compliance date under Section 217.152 of this Subpart 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.~~

- f) 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: Amended at 35 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.

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Where:

$$N_{act} = \sum_{i=1}^n \sum_{j=1}^k EM_{act(i,j)}$$

$$N_{all} = \sum_{i=1}^n \sum_{j=1}^k EM_{all(i,j)}$$

N_{act} = Total sum of the actual NO_x mass emissions from units included in the averaging plan for each fuel used (tons per ozone season and year).

N_{all} = Total sum of the allowable NO_x mass emissions from units 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.

i = Subscript denoting an individual unit.

j = Subscript denoting the fuel type used.

k = Number of different fuel types.

n = Number of different units in the averaging plan.

$EM_{all(i)}$ = Total mass of allowable NO_x emissions in tons for a unit as determined in subsection (f)(2) of this Section.

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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,

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

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

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

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- 2) Allowable emissions must be determined as follows:

When emission limits are prescribed in lb/mmBtu,

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

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

665

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

666

667

Where:

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- $EM_{act(i)}$ = Total mass of actual NO_x emissions in tons for a unit.
- $EM_{all(i)}$ = Total mass of allowable NO_x emissions in tons for a unit.
- 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.
- 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 NO_x 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 NO_x emission rate from USEPA's AP-42, as incorporated by reference in Section 217.104, or an uncontrolled NO_x 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.
- P = weight in tons of processed product.

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- 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

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674 emissions under Section 217.390, the testing and monitoring requirements under
 675 Section 217.394, and the recordkeeping and reporting requirements under Section
 676 217.396.

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 678 h) The owner or operator of an emission unit located at a petroleum refinery who is
 679 demonstrating compliance with an applicable Subpart through an emissions
 680 averaging plan under this Section may exclude from the calculation demonstrating
 681 compliance those time periods when an emission unit included in the emissions
 682 averaging plan is shut down for a maintenance turnaround, provided that such
 683 owner or operator notify the Agency in writing at least 30 days in advance of the
 684 shutdown of the emission unit for the maintenance turnaround and the shutdown
 685 of the emission unit does not exceed 45 days per ozone season or calendar year
 686 and NO_x pollution control equipment, if any, continues to operate on all other
 687 emission units operating during the maintenance turnaround.

688
 689 i) The owner or operator of an emission unit that combusts a combination of coke
 690 oven gas and other gaseous fuels and that is located at a source that manufactures
 691 iron and steel who is demonstrating compliance with an applicable Subpart
 692 through an emissions averaging plan under this Section may exclude from the
 693 calculation demonstrating compliance those time periods when the coke oven gas
 694 desulfurization unit included in the emissions averaging plan is shut down for
 695 maintenance, provided that such owner or operator notify the Agency in writing at
 696 least 30 days in advance of the shutdown of the coke oven gas desulfurization unit
 697 for maintenance and such shutdown does not exceed 35 days per ozone season or
 698 calendar year and NO_x pollution control equipment, if any, continues to operate
 699 on all other emission units operating during the maintenance period.

700
 701 j) The owner or operator of an emission unit located at a petroleum refinery who is
 702 demonstrating compliance with an applicable Subpart through an emissions
 703 averaging plan under this Section may exclude from the calculation demonstrating
 704 compliance those time periods when NO_x pollution control equipment that
 705 controls one or more emission units included in the emissions averaging plan is
 706 shut down for a maintenance turnaround, provided that:

- 707
 708 1) the owner or operator notify the Agency in writing, at least 30 days in
 709 advance of the shutdown, of the NO_x pollution control equipment for the
 710 maintenance turnaround;
 711
 712 2) the shutdown of the NO_x pollution control equipment does not exceed 45
 713 days per ozone season or calendar year; and
 714
 715 3) except for those emission units vented to the NO_x pollution control
 716 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: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART E: INDUSTRIAL BOILERS

Section 217.164 Emissions Limitations

- a) Except as provided for under Section 217.152, on and after January 1, ~~2015~~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.

Fuel	Emission Unit Type and Rated Heat Input Capacity (mmBtu/hr)	No _x Emissions Limitation (lb/mmBtu) or Requirement
Natural Gas or Other Gaseous Fuels	Industrial boiler greater than 100	0.08
	Industrial boiler less than or equal to 100	Combustion tuning
Distillate Fuel Oil	Industrial boiler greater than 100	0.10
	Industrial boiler less than or equal to 100	Combustion tuning
Other Liquid Fuels	Industrial boiler greater than 100	0.15
	Industrial boiler less than or equal to 100	Combustion tuning
Solid Fuel	Industrial boiler greater than 100, circulating fluidized bed combustor	0.12

Industrial boiler greater than 250	0.18
Industrial boiler greater than 100 but less than or equal to 250	0.25
Industrial boiler less than or equal to 100	Combustion tuning

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 733 b) For an industrial boiler combusting a combination of natural gas, coke oven gas,
 734 and blast furnace gas, the NO_x emissions limitation shall be calculated using the
 735 following equation:
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$$\text{NO}_x \text{ emissions limitation for period in lb/mmBtu} = \frac{(NO_{x_{NG}} * Btu_{NG}) + (NO_{x_{COG}} * Btu_{COG}) + (NO_{x_{BFG}} * Btu_{BFG})}{Btu_{NG} + Btu_{COG} + Btu_{BFG}}$$

737
 738 Where:
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- $NO_{x_{NG}}$ = 0.084 lb/mmBtu for natural gas
- Btu_{NG} = the heat input of natural gas in Btu over that period
- $NO_{x_{COG}}$ = 0.144 lb/mmBtu for coke oven gas
- Btu_{COG} = the heat input of coke oven gas in Btu over that period
- $NO_{x_{BFG}}$ = 0.0288 lb/mmBtu for blast furnace gas
- Btu_{BFG} = the heat input of blast furnace gas in Btu over that period

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 741 (Source: Amended at 35 Ill. Reg. _____, effective _____)
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743 **SUBPART F: PROCESS HEATERS**

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 745 **Section 217.184 Emissions Limitations**

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 747 Except as provided for under Section 217.152, on or after January 1, 2015~~2012~~, no person shall
 748 cause or allow emissions of NO_x into the atmosphere from any process heater to exceed the

749 following limitations. Compliance must be demonstrated with the applicable emissions
 750 limitation on an ozone season and annual basis.
 751

Fuel	Emission Unit Type and Rated Heat Input Capacity (mmBtu/hr)	No _x Emissions Limitation (lb/mmBtu) 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	0.05
	Process heater greater than 100, mechanical draft	0.08
	Process heater less than or equal to 100	Combustion tuning

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(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART G: GLASS MELTING FURNACES

Section 217.204 Emissions Limitations

- a) On and after January 1, ~~2012~~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.

Product	Emission Unit Type	No _x Emissions Limitation (lb/ton glass produced)
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Fuel	Emission Unit Type	No _x Emissions Limitation (lb/ton lime produced)
Gas	Rotary kiln	2.2
Coal	Rotary kiln	2.5

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(Source: Amended at 35 Ill. Reg. _____, effective _____)

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SUBPART I: IRON AND STEEL AND ALUMINUM MANUFACTURING

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Section 217.244 Emissions Limitations

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- a) On and after January 1, ~~2015~~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.

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Emission Unit Type	No _x Emissions Limitation (lb/mmBtu)
Reheat furnace, regenerative	0.18
Reheat furnace, 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	0.46
Galvanizing furnace, recuperative	0.16
Galvanizing furnace, cold air	0.06

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Industrial boiler greater than 250	0.18
Industrial boiler greater than 100 but less than or equal to 250	0.25
Industrial boiler less than or equal to 100	Combustion tuning

732
 733 b) For an industrial boiler combusting a combination of natural gas, coke oven gas,
 734 and blast furnace gas, the NO_x emissions limitation shall be calculated using the
 735 following equation:
 736

$$\text{NO}_x \text{ emissions limitation for period in lb/mmBtu} = \frac{(NO_{x_{NG}} * Btu_{NG}) + (NO_{x_{COG}} * Btu_{COG}) + (NO_{x_{BFG}} * Btu_{BFG})}{Btu_{NG} + Btu_{COG} + Btu_{BFG}}$$

737
 738 Where:
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- $NO_{x_{NG}}$ = 0.084 lb/mmBtu for natural gas
- Btu_{NG} = the heat input of natural gas in Btu over that period
- $NO_{x_{COG}}$ = 0.144 lb/mmBtu for coke oven gas
- Btu_{COG} = the heat input of coke oven gas in Btu over that period
- $NO_{x_{BFG}}$ = 0.0288 lb/mmBtu for blast furnace gas
- Btu_{BFG} = the heat input of blast furnace gas in Btu over that period

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 741 (Source: Amended at 35 Ill. Reg. _____, effective _____)
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743 SUBPART F: PROCESS HEATERS

744
 745 **Section 217.184 Emissions Limitations**

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 747 Except as provided for under Section 217.152, on or after January 1, ~~2015~~2012, no person shall
 748 cause or allow emissions of NO_x into the atmosphere from any process heater to exceed the

749 following limitations. Compliance must be demonstrated with the applicable emissions
 750 limitation on an ozone season and annual basis.
 751

Fuel	Emission Unit Type and Rated Heat Input Capacity (mmBtu/hr)	No _x Emissions Limitation (lb/mmBtu) 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	0.05
	Process heater greater than 100, mechanical draft	0.08
	Process heater less than or equal to 100	Combustion tuning

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 753 (Source: Amended at 35 Ill. Reg. _____, effective _____)
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755 **SUBPART G: GLASS MELTING FURNACES**

756
 757 **Section 217.204 Emissions Limitations**

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 759 a) On and after January 1, ~~2012~~²⁰¹⁵, no person shall cause or allow emissions of
 760 NO_x into the atmosphere from any glass melting furnace to exceed the following
 761 limitations. Compliance must be demonstrated with the emissions limitation on
 762 an ozone season and annual basis.
 763

Product	Emission Unit Type	No _x Emissions Limitation (lb/ton glass produced)
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Container Glass	Glass melting furnace	5.0
Flat Glass	Glass melting furnace	7.9
Other Glass	Glass melting furnace	11.0

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 765 b) The emissions during glass melting furnace startup (not to exceed 70 days) or
 766 furnace idling (operation at less than 35% of furnace capacity) shall be excluded
 767 from calculations for the purpose of demonstrating compliance with the seasonal
 768 and annual emissions limitations under this Section, provided that the owner or
 769 operator, at all times, including periods of startup and idling, to the extent
 770 practicable, maintain and operate any affected emission unit, including associated
 771 air pollution control equipment, in a manner consistent with good air pollution
 772 control practice for minimizing emissions. The owner or operator of a glass
 773 melting furnace must maintain records that include the date, time, and duration of
 774 any startup or idling in the operation of the glass melting furnace.
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776 (Source: Amended at 35 Ill. Reg. _____, effective _____)
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778 **SUBPART H: CEMENT AND LIME KILNS**
 779

780 **Section 217.224 Emissions Limitations**
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782 a) On and after January 1, ~~2015~~2012, no person shall cause or allow emissions of
 783 NO_x into the atmosphere from any cement kiln to exceed the following
 784 limitations. Compliance must be demonstrated with the applicable emissions
 785 limitation on an ozone season and annual basis.
 786

<u>Emission Unit Type</u>	<u>No_x Emissions Limitation (lb/ton clinker produced)</u>
Long dry kiln	5.1
Short dry kiln	5.1
Preheater kiln	3.8
Preheater/precalciner kiln	2.8

787
 788 b) On and after January 1, ~~2015~~2012, no person shall cause or allow emissions of
 789 NO_x into the atmosphere from any lime kiln to exceed the following limitations.
 790 Compliance must be demonstrated with the applicable emissions limitation on an
 791 ozone season and annual basis.

792

Fuel	Emission Unit Type	No _x Emissions Limitation (lb/ton lime produced)
Gas	Rotary kiln	2.2
Coal	Rotary kiln	2.5

793

794

(Source: Amended at 35 Ill. Reg. _____, effective _____)

795

796

SUBPART I: IRON AND STEEL AND ALUMINUM MANUFACTURING

797

798

Section 217.244 Emissions Limitations

799

800

- a) On and after January 1, ~~2015~~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.

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804

805

Emission Unit Type	No _x Emissions Limitation (lb/mmBtu)
Reheat furnace, regenerative	0.18
Reheat furnace, 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	0.46
Galvanizing furnace, recuperative	0.16
Galvanizing furnace, cold air	0.06

806

807 b) On and after January 1, ~~2015~~2012, no person shall cause or allow emissions of
 808 NO_x into the atmosphere from any reverberatory furnace or crucible furnace used
 809 in aluminum melting to exceed the following limitations. Compliance must be
 810 demonstrated with the applicable emissions limitation on an ozone season and
 811 annual basis.
 812

<u>Emission Unit Type</u>	<u>No_x Emissions Limitation (lb/mmBtu)</u>
Reverberatory furnace	0.08
Crucible furnace	0.16

813
 814 (Source: Amended at 35 Ill. Reg. _____, effective _____)
 815

816 **SUBPART M: ELECTRICAL GENERATING UNITS**

817
 818 **Section 217.344 Emissions Limitations**

819
 820 On and after January 1, ~~2015~~2012, no person shall cause or allow emissions of NO_x into the
 821 atmosphere from any fossil fuel-fired stationary boiler to exceed the following limitations.
 822 Compliance must be demonstrated with the applicable emissions limitation on an ozone season
 823 and annual basis.
 824

<u>Fuel</u>	<u>Emission Unit Type</u>	<u>No_x Emissions Limitation (lb/mmBtu)</u>
Solid	Boiler	0.12
Natural gas	Boiler	0.06
Liquid	Boiler that commenced operation before January 1, 2008	0.10
	Boiler that commenced operation on or after January 1, 2008	0.08

825
 826 (Source: Amended at 35 Ill. Reg. _____, effective _____)

827
 828 **Section 217.APPENDIX H Compliance Dates for Certain Emission Units at Petroleum**
 829 **Refineries**

830
 831 ExxonMobil Oil Corporation (Facility ID 197800AAA)
 832

Point	Emission Unit Description	Compliance Date
0019	Crude Vacuum Heater (13-B-2)	December 31, 2014
0038	Alky Iso-Stripper Reboiler (7-B-1)	December 31, 2014
0033	CHD Charge Heater (3-B-1)	December 31, 2014
0034	CHD Stripper Reboiler (3-B-2)	December 31, 2014
0021	Coker East Charge Heater (16-B-1A)	December 31, 2014
0021	Coker East Charge Heater (16-B-1B)	December 31, 2014
0018	Crude Atmospheric Heater (1-B-1A)	December 31, 2014
0018	Crude Atmospheric Heater (1-B-1B)	December 31, 2014

833
 834 ConocoPhillips Company Wood River Refinery (Facility ID 119090AAA)
 835

Point	Emission Unit Description	Compliance Date
0017	BEU-HM-1	December 31, 2012
0018	BEU-HM-2	December 31, 2012
0004	CR-1 Feed Preheat, H-1	December 31, 2012
0005	CR-1 1 st Interreactor Heater, H-2	December 31, 2012
0009	CR-1 3 rd Interreactor Heater, H-7	December 31, 2012
0091	CR-3 Charge Heater	December 31, 2012
0092	CR-3 1 st Reheat Heater, H-5	December 31, 2012
0082	Boiler 17	December 31, 2012
0080	Boiler 15	December 31, 2012
0073	Alky HM-2 Heater	December 31, 2012
0662	VF-4 Charge Heater, H-28	December 31, 2012
0664	DU-4 Charge Heater, H-24	December 31, 2014
0617	DCU Charge Heater, J-20	December 31, 2014
0014	HCU Fractionator Reboil, H-3	December 31, 2016
0024	DU-1 Primary Heater South, F-301	December 31, 2016
0025	DU-1 Secondary Heater North, F-302	December 31, 2016
0081	Boiler 16	December 31, 2016
0083	Boiler 18	December 31, 2016

0095	DHT Charge Heater	December 31, 2016
0028	DU-2 Lube Crude Heater, F-200	December 31, 2016
0029	DU-2 Mixed Crude Heater West, F-202	December 31, 2016
0030	DU-2 Mixed Crude Heater East, F-203	December 31, 2016
0084	CR-2 North Heater	December 31, 2016
0661	CR-2 South Heater	December 31, 2016

836

837

(Source: Amended at 35 Ill. Reg. _____, effective _____)

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

- 1) Heading of the Part: Family Practice Residency Code
- 2) Code Citation: 77 Ill. Adm. Code 590
- 3)

<u>Section Numbers</u> :	<u>Proposed Action</u> :
590.10	Repeal
590.20	Amend
590.30	Amend
590.40	Amend
590.60	New
590.100	Amend
590.120	Amend
590.130	Amend
590.140	Amend
590.150	New
590.160	New
590.170	New
590.200	Amend
590.210	Amend
590.220	Amend
590.230	Amend
590.240	Amend
590.300	Amend
590.310	Amend
590.320	Amend
590.330	Amend
590.400	Amend
590.410	Amend
590.420	Amend
590.APPENDIX A	Repeal
590.APPENDIX B	Repeal
590.APPENDIX C	Repeal
590.APPENDIX D	Repeal
- 4) Statutory Authority: Family Practice Residency Act [110 ILCS 935]
- 5) A Complete Description of the Subjects and Issues Involved: The proposed rulemaking will clarify scholarship repayment terms; requires repayment from those scholarship recipients who fail medical school, withdraw from medical school or graduate from medical school but fail to obtain a medical license; and expands practice opportunities

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

with underserved populations. The proposal will also incorporate requirements of the Illinois Grant Funds Recovery Act as it pertains to grants issued to family practice residency programs. Further, the proposal will incorporate certification requirements for grantees from Public Act 96-1064. Finally, the rulemaking will remove the Department's obligation to annually provide paper copies of a list of designated shortage areas in the State by providing Internet access to listings of designated shortage areas and populations. Appendices A, B, C and D will be also repealed.

The economic effect of this proposed rulemaking is unknown. Therefore, the Department requests any information that would assist in calculating this effect.

The Department anticipates adoption of this rulemaking approximately six to nine months after publication of the Notice in the *Illinois Register*.

- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: None
- 7) Will this rulemaking replace any emergency rulemaking currently in effect? No
- 8) Does this rulemaking contain an automatic repeal date? No
- 9) Does this rulemaking contain incorporations by reference? Yes
- 10) Are there any other proposed rulemakings pending on this Part? No
- 11) Statement of Statewide Policy Objective: These proposed amendments neither create nor expand any State mandate on units of local government, school districts or community college districts.
- 12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking: Interested persons may submit written comments within 45 days after the date of publication to:

Susan Meister
Illinois Department of Public Health
Division of Legal Services
535 West Jefferson Street, Fifth Floor
Springfield, Illinois 62761

Phone: 217/782-2043

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Fax: 217/524-8165
e-mail: dph.rules@illinois.gov

- 13) Initial Regulatory Flexibility Analysis:
- A) Types of small business, small municipalities and non-for-profit corporations affected: None
 - B) Reporting, bookkeeping or other procedures required for compliance: None
 - C) Types of professional skills necessary for compliance: None
- 14) Regulatory Agenda on which this rulemaking was summarized: January 2010

The full text of the Proposed Amendments begins on the next page: