

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

- 1) Heading of the Part: Definitions and General Procedures
- 2) Code Citation: 35 Ill. Adm. Code 211
- 3)

<u>Section Numbers</u> :	<u>Proposed Action</u> :
211.665	New Section
211.995	New Section
211.1315	New Section
211.1435	New Section
211.2355	New Section
211.2357	New Section
211.2625	New Section
211.3100	New Section
211.3355	New Section
211.3475	New Section
211.4280	New Section
211.5195	New Section
- 4) Statutory Authority: Implementing Section 10 and authorized by Sections 27 and 28 of the Environmental Protection Act [415 ILCS 5/10, 27, and 28]
- 5) A Complete Description of the Subjects and Issues Involved:

The Board's May 7, 2009 opinion and order (Amendments to 35 Ill. Adm. Code 217, Nitrogen Oxides Emissions, and 35 Ill. Adm. Code 211, R08-19, slip op. at 21-27 (summarizing twelve proposed new definitions)) describes the twelve new Sections of Part 211 proposed in this rulemaking.

This rulemaking is based on a proposal filed with the Board by the Illinois Environmental Protection Agency (Agency) on May 9, 2008. The Agency proposes to amend Parts 211 and 217 of the Board's air pollution regulations (35 Ill. Adm. Code 211, 217) to control nitrogen oxides (NO_x) emissions from major stationary sources in the nonattainment areas and from emission units including industrial boilers, process heaters, glass melting furnaces, cement kilns, lime kilns, furnaces used in steelmaking and aluminum melting, and fossil fuel-fired stationary boilers at such sources. In Part 211, the Agency proposes to add twelve new definitions of terms employed in proposed new Sections of Part 217.

On April 2, 2009, the Board granted the Agency's motion to expedite review of this proposal in order to meet federal deadlines for submission of State Implementation Plans for NO_x. In its May 7, 2009, opinion and order, the Board stated that, having granted the

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motion for expedited review, it is highly unlikely to grant any motion for an extension of the first-notice comment period. The Board strongly encouraged participants who wish to file a public comment to do so within the statutory 45-day period.

- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: The Agency stated that it relied on the following 68 sources in preparing its proposal to the Board:
1. The Clean Air Act, as amended in 1990 (42 USC 7401 *et seq.*);
 2. Illinois Environmental Protection Act (415 ILCS 5);
 3. Energy & Environmental Analysis, Inc., "Characterization of the U.S. Boiler Industrial Commercial Boiler Population", submitted to Oak Ridge National Laboratory, May 2005;
 4. [http://commons.wikimedia.org/wiki/Image:Water tube boiler schematic.png](http://commons.wikimedia.org/wiki/Image:Water_tube_boiler_schematic.png);
 5. [http://en.wikipedia.org/wiki/Image:Locomotive fire tube boiler schematic.png](http://en.wikipedia.org/wiki/Image:Locomotive_fire_tube_boiler_schematic.png);
 6. Babcock & Wilcox Company; Steam, Its Generation and Use, 40th Edition, 1992;
 7. Neil Johnson, "Fundamentals of Stoker Fired Boiler Design and Operation", presented at CIBO Emission Controls Technology Conference, July 15-17, 2002;
 8. Letter to Mr. Regulator, New Hampshire Division of Environmental Services, from Daniel J. Willems, Product Development, Cleaver Brooks, dated May 19, 2006;
 9. http://www1.eere.energy.gov/industry/bestpractices/pdfs/steam4_boiler_efficiency.pdf;
 10. http://www.energysolutionscenter.org/boilerburner/Eff_Improve/Efficiency/Oxygen_Control.asp;
 11. <http://files.asme.org/asmeorg/Codes/CertifAccred/Personnel/2971.pdf>;
 12. http://www.coen.com/i_html/white_lowcostnoxpm.html;

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13. Rajani Varagani (n.d.), "A Cost Effective Low NO_x Retrofit Technology for Industrial Boilers," cited within CIBO Industrial Emissions Control Technology III, August 1-3, 2005;
14. Email from Jim Staudt, Andover Technology, to R. Gifford Broderick, Combustion Components Associates, Based on estimate for a 4-burner project, dated October 16, 2003;
15. http://www.johnzink.com/products/burners/html_todd/burn_todd_cs_104.htm;
16. Sacramento General Services Heating Plant Case Study: COEN web site: <http://www.coen.com/mrktli/ibrochures/pdf/qla.pdf>;
17. Zink, John (2003) "U.S. Borax TODD Ultra Low Emissions Burner Installment";
18. Zink, John (2003) "TODD Ultra Low Emissions Burner Installment";
19. Coen Company, "Ultra Low NO_x Gas-Fired Burner with Air Preheat", Final Report, prepared for California Air Resources Board, November 23, #2000;
20. Memorandum from Jim Staudt, Andover Technology Partners, to Sikander Khan, United States Environmental Protection Agency, providing comments in response to September 10, 2003 email, dated October 24, 2003;
21. Memorandum from Chad Whiteman, Institute of Clean Air Companies to Christopher Recchia, Ozone Transport Commission, regarding Selective Non-Catalytic Reduction Technology Costs for Industrial Sources, dated October 6, 2006;
22. Northeast States for Coordinated Air Use Management (NESCAUM), "Status Report on NO_x: Control Technologies and Cost Effectiveness for Utility Boilers", prepared by Jim Staudt, Andover Technology Partners, June 1998;
23. Northeast States for Coordinated Air Use Management (NESCAUM), "Status Report on NO_x Controls", prepared by Jim Staudt, Andover Technology Partners, December 2000 ("NESCAUM 2000 report");
24. Institute to Clean Air Companies, Inc., "White Paper: Selective Catalytic Reduction (SCR) Control of NO_x Emissions", November 1997;

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25. <http://www.cormetech.com/experience.htm>;
26. "Economic Indicators", Chemical Engineering, p. 102, September 2006;
27. Vatatuck, William M., "Updating the CE Plant Cost Index", Chemical Engineering, p. 69, January 2002;
28. State and Territorial Air Pollution (STAPPA) and Association of Local Air Pollution Control Offices (ALAPCO), "Controlling Fine Particulate Matter Under the Clean Air Act: A Menu of Options", March 2006;
29. Erickson, C., and Staudt, J., "Selective Catalytic Reduction System Performance and Reliability Review", presented at the EPRI-EPA-DOE-AWMA Combined Utility Air Pollution Control Conference, the Mega Conference, Baltimore, August 28-31, 2006;
30. Cichanowicz, E.J., "Current Capital Cost and Cost-Effectiveness of Power Plant Emissions Control Technologies", prepared for Utility Air Regulatory Group, June 2007.
31. <http://www.mobotecusa.com/projects/vermillion-sellsheet.pdf>;
32. <http://www.mobotecusa.com/projects/capefear6-sellsheet.pdf>;
33. STAPPA/ALAPCO, "Controlling Nitrogen Oxides under the Clean Air Act: A Menu of Options", July 1994;
34. Khan, Sikander, United States Environmental Protection Agency, "Methodology, Assumptions, and References Preliminary NO_x Controls Cost Estimates for Industrial Boilers", October-November 2003;
35. MACTEC Federal Programs/MACTEC Engineering and Consulting, Inc., "Midwest Regional Planning Organization (RPO): Petroleum Refinery Best Available Retrofit Technology (BART)", Engineering Analysis, prepared for The Lake Michigan Air Directors Consortium (LADCO), March 30, 2005. ("LADCO 2005");
36. http://www.epa.gov/air/ozonepollution/SIPToolkit/documents/stationary_nox_list.pdf;

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37. http://www.callidus.com/pages/next_gen.htm;
38. Heat Input Affects NO_x Emissions from Internal Flue Gas Re-Circulation Burners
<http://texasiof.ces.utexas.edu/texasshowcase/pdfs/presentations/c1/dbishop.pdf>;
39. http://www.andovertechnology.com/HGA_Market_Report_secure.pdf;
40. <http://vwww.valleyair.org/rules/currnrules/r4304.pdf>;
41. www.perf.org/ppt/Bishop.ppt;
42. State of New Jersey Department of Environmental Protection, State of the Art Manual for Boilers and Process Heaters, July 1997 (revised February 22, 2004).
www.state.nj.us/dep/aqpp/downloads/sota/sota12.pdf;
43. Partha Ganguli, Workgroup Recommendations and Other Potential Control Measures Stationary Combustion Sources Workgroup, May 11, 2006.
http://www.nj.gov/dep/airworkgroups/docs/wps/SCS004A_fin.pdf;
44. Sun, W.H., Bisnett, M.J., et al., "Reduction of NO_x Emissions from Cement Kiln/Calcliner through the Use of the NO_xOUT Process", International Specialty Conference on Waste Combustion in Boilers and Industrial Furnaces, April 21, 1994;
45. <http://www.cadencerecycling.com/pdf/6-PageComplete.pdf>;
46. Hansen, E., Cadence Environmental Energy Inc., "Staged Combustion for NO_x Reduction Using High Pressure Air Injection", undated.
<http://www.cadencerecycling.com/pdf/IEEE2002.pdf>;
47. Sabo, E., MACTEC Federal Programs, Inc., "Candidate Control Measures for Cement Plants", LADCO/MRPO, Regional Air Quality Workshop, June 28, 2005;
48. United States Environmental Protection Agency, Office of Air Quality, Planning and Standards, Technical Bulletin: Nitrogen Oxides (NO_x), Why and How They Are Controlled, EPA-456/F-99-006R, November 1999.
<http://www.epa.gov/ttn/catc/dir1/fnoxdoc.pdf>;

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49. Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone, Rule, 63 *Fed. Reg.* 57356, October 27, 1998;
50. State of Michigan v. USEPA, 213 F.3d 663 (D.C. Cir. 2000);
51. Federal Implementation Plans to Reduce the Regional Transport of Ozone; Proposed Rule, 63 *Fed. Reg.* 56394, October 21, 1998;
52. United States Environmental Protection Agency, Office of Air and Radiation, Regulatory Impact Analysis for the NO_x SIP Call, FIP, and Section 126 Petitions, Volume 1: Costs and Economic Impacts, September 1998;
53. Waible, R., Price, D., Tish, P., Halpern, M., "Advanced Burner Technology for Stringent NO_x Regulations", presented at the American Petroleum Institute Midyear Refining Meeting, Orlando, FL, May 8, 1990;
54. Nguyen, Quang, Koppang, Richard, Energy and Environmental Research Corporation, Advanced Steel Reheat Furnaces Research and Development, Final Report, prepared for U.S. Department of Energy, January 14, 1999;
55. Rowlan, Steven J. and Sun, William H., "NO_x Control on Preheat and Radiant Furnaces at Nucor Steel Mills through Urea SNCR, SCR, and Hybrid Processes", presented at ICAC Forum, Houston, TX, February 12-13, 2002.
<http://www.icac.com/Files/Rowlan.pdf>;
56. Kobayashi, H., "Advances in Oxy-Fuel Fired Glass Melting Technology", presented at XX International Congress on Glass (ICG), Kyoto, Japan, September 26- October 1, 2004;
57. <http://wwwl.eere.energy.gov/industry/glass/pdfs/airstaging.pdf>;
58. http://www.gastechnology.org/webroot/app/xn/xd.aspx?it=enweb&xd=4reportspubs%5C4_8focus%5Ccoxygenrichedairstaging.xml;
59. http://www.osti.gov/energycitations/product.biblio.jsp?osti_id=616314;
60. Midwest RPO Candidate Control Measures, Interim White Paper, Source Category: Glass Manufacturing, December 2, 2005;

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61. Energetics, Inc., Energy and Environmental Profile of the U.S. Aluminum Industry, prepared for U.S. Department of Energy, July 1997;
62. <http://www1.eere.energy.gov/industry/aluminum/pdfs/aluminum.pdf>;
63. Schalles, David G., The Next Generation of Combustion Technology for Aluminum Melting, undated. <http://www.bloomeng.com/tmspaper-FINAL.doc>;
64. <http://www.bloomeng.com/11501umiflame.pdf>;
65. <http://www.eere.energy.gov/industry/combustion/pdfs/oscllcomb.pdf>;
66. California South Coast Rule 2002, Allocations for oxides of Nitrogen (NO_x) and oxides of Sulfur (SO_x), amended January 7, 2005;
67. <http://www.epa.gov/ttn/emc/cem.html>; and
68. Alternative Control Techniques Document – NO_x Emissions from Cement Manufacturing, EPA-453/R-94-004, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, March 1994.
- 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?
- | | | |
|------------------------|-------------------------|------------------------------------|
| <u>Section Number:</u> | <u>Proposed Action:</u> | <u>Illinois Register Citation:</u> |
| 211.1920 | Amend | 32 Ill. Reg. 17055 (Oct. 31, 2008) |
- 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 45 days after the date of publication in the *Illinois Register*. Comments should reference Docket

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R08-19 and be addressed to:

Clerk's Office
Illinois Pollution Control Board
100 W. Randolph St., Suite 11-500
Chicago, IL 60601

Interested persons may request copies of the Board's opinion and order by calling the Clerk's office at 312-814-3620, or download from the Board's Web site at www.ipcb.state.il.us.

For more information contact Tim Fox at 312/814-6085 or email at foxt@ipcb.state.il.us.

- 13) Initial Regulatory Flexibility Analysis: In Part 211, the Agency proposes to add twelve new definitions of terms employed in the proposed new Sections of Part 217.
- A) Types of small businesses, small municipalities and not for profit corporations affected: None expected.
- B) Reporting, bookkeeping or other procedures required for compliance: The proposed rulemaking requires the owner or operator of an affected source to perform emissions monitoring, complete required tests, and maintain records and make reports as required.
- C) Types of Professional skills necessary for compliance: No professional skills beyond those currently required by the existing state and federal air pollution control regulations applicable to affected sources will be required.
- 14) Regulatory Agenda on which this rulemaking was summarized: July 2006

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 c: EMISSION STANDARDS AND LIMITATIONS
FOR STATIONARY SOURCES

PART 211
DEFINITIONS AND GENERAL PROVISIONS

SUBPART A: GENERAL PROVISIONS

Section
211.101 Incorporations by Reference
211.102 Abbreviations and Conversion Factors

SUBPART B: DEFINITIONS

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

211.680 Bakery Oven
211.685 Basecoat/Clearcoat System
211.690 Batch Loading
211.695 Batch Operation
211.696 Batch Process Train
211.710 Bead-Dipping
211.730 Binders
211.740 Brakehorsepower (rated-bhp)
211.750 British Thermal Unit
211.770 Brush or Wipe Coating
211.790 Bulk Gasoline Plant
211.810 Bulk Gasoline Terminal
211.820 Business Machine Plastic Parts
211.830 Can
211.850 Can Coating
211.870 Can Coating Line
211.890 Capture
211.910 Capture Device
211.930 Capture Efficiency
211.950 Capture System
211.953 Carbon Adsorber
211.955 Cement
211.960 Cement Kiln
211.970 Certified Investigation
211.980 Chemical Manufacturing Process Unit
211.990 Choke Loading
211.995 Circulating Fluidized Bed Combustor
211.1010 Clean Air Act
211.1050 Cleaning and Separating Operation
211.1070 Cleaning Materials
211.1090 Clear Coating
211.1110 Clear Topcoat
211.1120 Clinker
211.1130 Closed Purge System
211.1150 Closed Vent System
211.1170 Coal Refuse
211.1190 Coating
211.1210 Coating Applicator
211.1230 Coating Line
211.1250 Coating Plant
211.1270 Coil Coating
211.1290 Coil Coating Line
211.1310 Cold Cleaning
211.1312 Combined Cycle System
211.1315 Combustion Tuning
211.1316 Combustion Turbine
211.1320 Commence Commercial Operation
211.1324 Commence Operation
211.1328 Common Stack
211.1330 Complete Combustion
211.1350 Component
211.1370 Concrete Curing Compounds
211.1390 Concentrated Nitric Acid Manufacturing Process
211.1410 Condensate
211.1430 Condensible PM-10
211.1435 Container Glass
211.1465 Continuous Automatic Stoking

211.1467 Continuous Coater
211.1470 Continuous Process
211.1490 Control Device
211.1510 Control Device Efficiency
211.1515 Control Period
211.1520 Conventional Air Spray
211.1530 Conventional Soybean Crushing Source
211.1550 Conveyorized Degreasing
211.1570 Crude Oil
211.1590 Crude Oil Gathering
211.1610 Crushing
211.1630 Custody Transfer
211.1650 Cutback Asphalt
211.1670 Daily-Weighted Average VOM Content
211.1690 Day
211.1710 Degreaser
211.1730 Delivery Vessel
211.1740 Diesel Engine
211.1750 Dip Coating
211.1770 Distillate Fuel Oil
211.1780 Distillation Unit
211.1790 Drum
211.1810 Dry Cleaning Operation or Dry Cleaning Facility
211.1830 Dump-Pit Area
211.1850 Effective Grate Area
211.1870 Effluent Water Separator
211.1875 Elastomeric Materials
211.1880 Electromagnetic Interference/Radio Frequency Interference (EMI/RFI)
Shielding Coatings
211.1885 Electronic Component
211.1890 Electrostatic Bell or Disc Spray
211.1900 Electrostatic Prep Coat
211.1910 Electrostatic Spray
211.1920 Emergency or Standby Unit
211.1930 Emission Rate
211.1950 Emission Unit
211.1970 Enamel
211.1990 Enclose
211.2010 End Sealing Compound Coat
211.2030 Enhanced Under-the-Cup Fill
211.2050 Ethanol Blend Gasoline
211.2070 Excess Air
211.2080 Excess Emissions
211.2090 Excessive Release
211.2110 Existing Grain-Drying Operation (Repealed)
211.2130 Existing Grain-Handling Operation (Repealed)
211.2150 Exterior Base Coat
211.2170 Exterior End Coat
211.2190 External Floating Roof
211.2210 Extreme Performance Coating
211.2230 Fabric Coating
211.2250 Fabric Coating Line
211.2270 Federally Enforceable Limitations and Conditions
211.2285 Feed Mill
211.2290 Fermentation Time
211.2300 Fill
211.2310 Final Repair Coat

211.2330 Firebox
211.2350 Fixed-Roof Tank
211.2355 Flare
211.2357 Flat Glass
211.2360 Flexible Coating
211.2365 Flexible Operation Unit
211.2370 Flexographic Printing
211.2390 Flexographic Printing Line
211.2410 Floating Roof
211.2420 Fossil Fuel
211.2425 Fossil Fuel-Fired
211.2430 Fountain Solution
211.2450 Freeboard Height
211.2470 Fuel Combustion Emission Unit or Fuel Combustion Emission Source
211.2490 Fugitive Particulate Matter
211.2510 Full Operating Flowrate
211.2530 Gas Service
211.2550 Gas/Gas Method
211.2570 Gasoline
211.2590 Gasoline Dispensing Operation or Gasoline Dispensing Facility
211.2610 Gel Coat
211.2620 Generator
211.2625 Glass Melting Furnace
211.2630 Gloss Reducers
211.2650 Grain
211.2670 Grain-Drying Operation
211.2690 Grain-Handling and Conditioning Operation
211.2710 Grain-Handling Operation
211.2730 Green-Tire Spraying
211.2750 Green Tires
211.2770 Gross Heating Value
211.2790 Gross Vehicle Weight Rating
211.2810 Heated Airless Spray
211.2815 Heat Input
211.2820 Heat Input Rate
211.2830 Heatset
211.2850 Heatset Web Offset Lithographic Printing Line
211.2870 Heavy Liquid
211.2890 Heavy Metals
211.2910 Heavy Off-Highway Vehicle Products
211.2930 Heavy Off-Highway Vehicle Products Coating
211.2950 Heavy Off-Highway Vehicle Products Coating Line
211.2970 High Temperature Aluminum Coating
211.2990 High Volume Low Pressure (HVLV) Spray
211.3010 Hood
211.3030 Hot Well
211.3050 Housekeeping Practices
211.3070 Incinerator
211.3090 Indirect Heat Transfer
211.3100 Industrial Boiler
211.3110 Ink
211.3130 In-Process Tank
211.3150 In-Situ Sampling Systems
211.3170 Interior Body Spray Coat
211.3190 Internal-Floating Roof
211.3210 Internal Transferring Area
211.3230 Lacquers

211.3250 Large Appliance
211.3270 Large Appliance Coating
211.3290 Large Appliance Coating Line
211.3300 Lean-Burn Engine
211.3310 Light Liquid
211.3330 Light-Duty Truck
211.3350 Light Oil
211.3355 Lime Kiln
211.3370 Liquid/Gas Method
211.3390 Liquid-Mounted Seal
211.3410 Liquid Service
211.3430 Liquids Dripping
211.3450 Lithographic Printing Line
211.3470 Load-Out Area
211.3475 Load Shaving Unit
211.3480 Loading Event
211.3483 Long Dry Kiln
211.3485 Long Wet Kiln
211.3487 Low-NOx Burner
211.3490 Low Solvent Coating
211.3500 Lubricating Oil
211.3510 Magnet Wire
211.3530 Magnet Wire Coating
211.3550 Magnet Wire Coating Line
211.3570 Major Dump Pit
211.3590 Major Metropolitan Area (MMA)
211.3610 Major Population Area (MPA)
211.3620 Manually Operated Equipment
211.3630 Manufacturing Process
211.3650 Marine Terminal
211.3660 Marine Vessel
211.3670 Material Recovery Section
211.3690 Maximum Theoretical Emissions
211.3695 Maximum True Vapor Pressure
211.3710 Metal Furniture
211.3730 Metal Furniture Coating
211.3750 Metal Furniture Coating Line
211.3770 Metallic Shoe-Type Seal
211.3780 Mid-Kiln Firing
211.3790 Miscellaneous Fabricated Product Manufacturing Process
211.3810 Miscellaneous Formulation Manufacturing Process
211.3830 Miscellaneous Metal Parts and Products
211.3850 Miscellaneous Metal Parts and Products Coating
211.3870 Miscellaneous Metal Parts or Products Coating Line
211.3890 Miscellaneous Organic Chemical Manufacturing Process
211.3910 Mixing Operation
211.3915 Mobile Equipment
211.3930 Monitor
211.3950 Monomer
211.3960 Motor Vehicles
211.3965 Motor Vehicle Refinishing
211.3970 Multiple Package Coating
211.3980 Nameplate Capacity
211.3990 New Grain-Drying Operation (Repealed)
211.4010 New Grain-Handling Operation (Repealed)
211.4030 No Detectable Volatile Organic Material Emissions
211.4050 Non-Contact Process Water Cooling Tower

211.4055 Non-Flexible Coating
211.4065 Non-Heatset
211.4067 NOx Trading Program
211.4070 Offset
211.4090 One Hundred Percent Acid
211.4110 One-Turn Storage Space
211.4130 Opacity
211.4150 Opaque Stains
211.4170 Open Top Vapor Degreasing
211.4190 Open-Ended Valve
211.4210 Operator of a Gasoline Dispensing Operation or Operator of a
Gasoline Dispensing Facility
211.4230 Organic Compound
211.4250 Organic Material and Organic Materials
211.4260 Organic Solvent
211.4270 Organic Vapor
211.4280 Other Glass
211.4290 Oven
211.4310 Overall Control
211.4330 Overvarnish
211.4350 Owner of a Gasoline Dispensing Operation or Owner of a Gasoline
Dispensing Facility
211.4370 Owner or Operator
211.4390 Packaging Rotogravure Printing
211.4410 Packaging Rotogravure Printing Line
211.4430 Pail
211.4450 Paint Manufacturing Source or Paint Manufacturing Plant
211.4470 Paper Coating
211.4490 Paper Coating Line
211.4510 Particulate Matter
211.4530 Parts Per Million (Volume) or PPM (Vol)
211.4550 Person
211.4590 Petroleum
211.4610 Petroleum Liquid
211.4630 Petroleum Refinery
211.4650 Pharmaceutical
211.4670 Pharmaceutical Coating Operation
211.4690 Photochemically Reactive Material
211.4710 Pigmented Coatings
211.4730 Plant
211.4740 Plastic Part
211.4750 Plasticizers
211.4770 PM-10
211.4790 Pneumatic Rubber Tire Manufacture
211.4810 Polybasic Organic Acid Partial Oxidation Manufacturing Process
211.4830 Polyester Resin Material(s)
211.4850 Polyester Resin Products Manufacturing Process
211.4870 Polystyrene Plant
211.4890 Polystyrene Resin
211.4910 Portable Grain-Handling Equipment
211.4930 Portland Cement Manufacturing Process Emission Source
211.4950 Portland Cement Process or Portland Cement Manufacturing Plant
211.4960 Potential Electrical Output Capacity
211.4970 Potential to Emit
211.4990 Power Driven Fastener Coating
211.5010 Precoat
211.5015 Preheater Kiln

211.5020 Preheater/Precalciner Kiln
211.5030 Pressure Release
211.5050 Pressure Tank
211.5060 Pressure/Vacuum Relief Valve
211.5061 Pretreatment Wash Primer
211.5065 Primary Product
211.5070 Prime Coat
211.5080 Primer Sealer
211.5090 Primer Surfacer Coat
211.5110 Primer Surfacer Operation
211.5130 Primers
211.5150 Printing
211.5170 Printing Line
211.5185 Process Emission Source
211.5190 Process Emission Unit
211.5195 Process Heater
211.5210 Process Unit
211.5230 Process Unit Shutdown
211.5245 Process Vent
211.5250 Process Weight Rate
211.5270 Production Equipment Exhaust System
211.5310 Publication Rotogravure Printing Line
211.5330 Purged Process Fluid
211.5340 Rated Heat Input Capacity
211.5350 Reactor
211.5370 Reasonably Available Control Technology (RACT)
211.5390 Reclamation System
211.5410 Refiner
211.5430 Refinery Fuel Gas
211.5450 Refinery Fuel Gas System
211.5470 Refinery Unit or Refinery Process Unit
211.5480 Reflective Argent Coating
211.5490 Refrigerated Condenser
211.5500 Regulated Air Pollutant
211.5510 Reid Vapor Pressure
211.5530 Repair
211.5550 Repair Coat
211.5570 Repaired
211.5580 Repowering
211.5590 Residual Fuel Oil
211.5600 Resist Coat
211.5610 Restricted Area
211.5630 Retail Outlet
211.5640 Rich-Burn Engine
211.5650 Ringelmann Chart
211.5670 Roadway
211.5690 Roll Coater
211.5710 Roll Coating
211.5730 Roll Printer
211.5750 Roll Printing
211.5770 Rotogravure Printing
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211.APPENDIX A Rule into Section Table
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AUTHORITY: Implementing Sections 9, 9.1, 9.9 and 10 and authorized by Sections 27 and 28 of the Environmental Protection Act [415 ILCS 5/9, 9.1, 9.9, 10, 27 and 28].

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

1990; amended in R88-30(B) at 15 Ill. Reg. 5223, effective March 28, 1991; amended in R88-14 at 15 Ill. Reg. 7901, effective May 14, 1991; amended in R91-10 at 15 Ill. Reg. 15564, effective October 11, 1991; amended in R91-6 at 15 Ill. Reg. 15673, effective October 14, 1991; amended in R91-22 at 16 Ill. Reg. 7656, effective May 1, 1992; amended in R91-24 at 16 Ill. Reg. 13526, effective August 24, 1992; amended in R93-9 at 17 Ill. Reg. 16504, effective September 27, 1993; amended in R93-11 at 17 Ill. Reg. 21471, effective December 7, 1993; amended in R93-14 at 18 Ill. Reg. 1253, effective January 18, 1994; amended in R94-12 at 18 Ill. Reg. 14962, effective September 21, 1994; amended in R94-14 at 18 Ill. Reg. 15744, effective October 17, 1994; amended in R94-15 at 18 Ill. Reg. 16379, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16929, effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6823, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7344, effective May 22, 1995; amended in R95-2 at 19 Ill. Reg. 11066, effective July 12, 1995; amended in R95-16 at 19 Ill. Reg. 15176, effective October 19, 1995; amended in R96-5 at 20 Ill. Reg. 7590, effective May 22, 1996; amended in R96-16 at 21 Ill. Reg. 2641, effective February 7, 1997; amended in R97-17 at 21 Ill. Reg. 6489, effective May 16, 1997; amended in R97-24 at 21 Ill. Reg. 7695, effective June 9, 1997; amended in R96-17 at 21 Ill. Reg. 7856, effective June 17, 1997; amended in R97-31 at 22 Ill. Reg. 3497, effective February 2, 1998; amended in R98-17 at 22 Ill. Reg. ~~Reg. 11405~~, effective June 22, 1998; ~~amended in R01-9 at 25 Ill. Reg. 128, effective December 26, 2000; amended in R01-119 at 25 Ill. Reg. 4597-108, effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4582,~~ effective March 15, 2001; amended in R01-17 at 25 Ill. Reg. 5900, effective April 17, 2001; amended in R05-16 at 29 Ill. Reg. 8181, effective May 23, 2005; amended in R05-11 at 29 Ill. Reg. 8892, effective June 13, 2005; amended in R04-12/20 at 30 Ill. Reg. 9654, effective May 15, 2006; amended in R07-18 at 31 Ill. Reg. 14254, effective September 25, 2007; amended in R08-066 at 32 Ill. Reg. 1387, effective January 16, 2008; amended in R08-19 at 33 Ill. Reg. _____, effective _____.

SUBPART B: DEFINITIONS

Section 211.665 Auxiliary Boiler

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

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

Section 211.995 Circulating Fluidized Bed Combustor

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

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

Section 211.1315 Combustion Tuning

"Combustion tuning" means, for purposes of Part 217, review and adjustment of a combustion process to maintain combustion efficiency of an emission unit, as

performed in accordance with procedures provided by the manufacturer or by a trained technician.

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

Section 211.1435 Container Glass

"Container glass" means, for purposes of Part 217, glass made of soda-lime recipe, clear or colored, ~~which~~ that is pressed or blown, or both, into bottles, jars, ampoules, and other products listed in Standard Industrial Classification 3221.

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

Section 211.2355 Flare

"Flare" means an open combustor without enclosure or shroud.

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

Section 211.2357 Flat Glass

"Flat glass" means, for purposes of Part 217, glass made of soda-lime recipe and produced into continuous flat sheets and other products listed in Standard Industrial Classification 3211.

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

Section 211.2625 Glass Melting Furnace

"Glass melting furnace" means, for purposes of Part 217, a unit comprising a refractory vessel in which raw materials are charged and melted at high temperature to produce molten glass.

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

Section 211.3100 Industrial Boiler

"Industrial boiler" means, for purposes of Part 217, an enclosed vessel in which water is heated and circulated either as hot water or as steam for heating or for power, or both. This term does not include a heat recovery steam generator that captures waste heat from a combustion turbine and boilers serving a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale, and cogeneration units, if such boilers meet the applicability criteria under Subpart M of Part 217.

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

Section 211.3355 Lime Kiln

"Lime kiln" means, for purposes of Part 217, an enclosed combustion device used to calcine lime mud, which consists primarily of calcium carbonate, into calcium oxide.

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

Section 211.3475 Load Shaving Unit

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

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

Section 211.4280 Other Glass

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

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

Section 211.5195 Process Heater

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

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

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1ST NOTICE VERSION

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334	211.4890	Polystyrene Resin
335	211.4910	Portable Grain-Handling Equipment
336	211.4930	Portland Cement Manufacturing Process Emission Source
337	211.4950	Portland Cement Process or Portland Cement Manufacturing Plant
338	211.4960	Potential Electrical Output Capacity
339	211.4970	Potential to Emit
340	211.4990	Power Driven Fastener Coating
341	211.5010	Precoat
342	211.5015	Preheater Kiln
343	211.5020	Preheater/Precalciner Kiln
344	211.5030	Pressure Release

345	211.5050	Pressure Tank
346	211.5060	Pressure/Vacuum Relief Valve
347	211.5061	Pretreatment Wash Primer
348	211.5065	Primary Product
349	211.5070	Prime Coat
350	211.5080	Primer Sealer
351	211.5090	Primer Surfacer Coat
352	211.5110	Primer Surfacer Operation
353	211.5130	Primers
354	211.5150	Printing
355	211.5170	Printing Line
356	211.5185	Process Emission Source
357	211.5190	Process Emission Unit
358	<u>211.5195</u>	<u>Process Heater</u>
359	211.5210	Process Unit
360	211.5230	Process Unit Shutdown
361	211.5245	Process Vent
362	211.5250	Process Weight Rate
363	211.5270	Production Equipment Exhaust System
364	211.5310	Publication Rotogravure Printing Line
365	211.5330	Purged Process Fluid
366	211.5340	Rated Heat Input Capacity
367	211.5350	Reactor
368	211.5370	Reasonably Available Control Technology (RACT)
369	211.5390	Reclamation System
370	211.5410	Refiner
371	211.5430	Refinery Fuel Gas
372	211.5450	Refinery Fuel Gas System
373	211.5470	Refinery Unit or Refinery Process Unit
374	211.5480	Reflective Argent Coating
375	211.5490	Refrigerated Condenser
376	211.5500	Regulated Air Pollutant
377	211.5510	Reid Vapor Pressure
378	211.5530	Repair
379	211.5550	Repair Coat
380	211.5570	Repaired
381	211.5580	Repowering
382	211.5590	Residual Fuel Oil
383	211.5600	Resist Coat
384	211.5610	Restricted Area
385	211.5630	Retail Outlet
386	211.5640	Rich-Burn Engine
387	211.5650	Ringelmann Chart

388	211.5670	Roadway
389	211.5690	Roll Coater
390	211.5710	Roll Coating
391	211.5730	Roll Printer
392	211.5750	Roll Printing
393	211.5770	Rotogravure Printing
394	211.5790	Rotogravure Printing Line
395	211.5810	Safety Relief Valve
396	211.5830	Sandblasting
397	211.5850	Sanding Sealers
398	211.5870	Screening
399	211.5880	Screen Printing on Paper
400	211.5890	Sealer
401	211.5910	Semi-Transparent Stains
402	211.5930	Sensor
403	211.5950	Set of Safety Relief Valves
404	211.5970	Sheet Basecoat
405	211.5980	Sheet-Fed
406	211.5990	Shotblasting
407	211.6010	Side-Seam Spray Coat
408	211.6025	Single Unit Operation
409	211.6030	Smoke
410	211.6050	Smokeless Flare
411	211.6060	Soft Coat
412	211.6070	Solvent
413	211.6090	Solvent Cleaning
414	211.6110	Solvent Recovery System
415	211.6130	Source
416	211.6140	Specialty Coatings
417	211.6145	Specialty Coatings for Motor Vehicles
418	211.6150	Specialty High Gloss Catalyzed Coating
419	211.6170	Specialty Leather
420	211.6190	Specialty Soybean Crushing Source
421	211.6210	Splash Loading
422	211.6230	Stack
423	211.6250	Stain Coating
424	211.6270	Standard Conditions
425	211.6290	Standard Cubic Foot (scf)
426	211.6310	Start-Up
427	211.6330	Stationary Emission Source
428	211.6350	Stationary Emission Unit
429	211.6355	Stationary Gas Turbine
430	211.6360	Stationary Reciprocating Internal Combustion Engine

431	211.6370	Stationary Source
432	211.6390	Stationary Storage Tank
433	211.6400	Stencil Coat
434	211.6410	Storage Tank or Storage Vessel
435	211.6420	Strippable Spray Booth Coating
436	211.6430	Styrene Devolatilizer Unit
437	211.6450	Styrene Recovery Unit
438	211.6470	Submerged Loading Pipe
439	211.6490	Substrate
440	211.6510	Sulfuric Acid Mist
441	211.6530	Surface Condenser
442	211.6540	Surface Preparation Materials
443	211.6550	Synthetic Organic Chemical or Polymer Manufacturing Plant
444	211.6570	Tablet Coating Operation
445	211.6580	Texture Coat
446	211.6590	Thirty-Day Rolling Average
447	211.6610	Three-Piece Can
448	211.6620	Three or Four Stage Coating System
449	211.6630	Through-the-Valve Fill
450	211.6650	Tooling Resin
451	211.6670	Topcoat
452	211.6690	Topcoat Operation
453	211.6695	Topcoat System
454	211.6710	Touch-Up
455	211.6720	Touch-Up Coating
456	211.6730	Transfer Efficiency
457	211.6750	Tread End Cementing
458	211.6770	True Vapor Pressure
459	211.6790	Turnaround
460	211.6810	Two-Piece Can
461	211.6830	Under-the-Cup Fill
462	211.6850	Undertread Cementing
463	211.6860	Uniform Finish Blender
464	211.6870	Unregulated Safety Relief Valve
465	211.6880	Vacuum Metallizing
466	211.6890	Vacuum Producing System
467	211.6910	Vacuum Service
468	211.6930	Valves Not Externally Regulated
469	211.6950	Vapor Balance System
470	211.6970	Vapor Collection System
471	211.6990	Vapor Control System
472	211.7010	Vapor-Mounted Primary Seal
473	211.7030	Vapor Recovery System

474	211.7050	Vapor-Suppressed Polyester Resin
475	211.7070	Vinyl Coating
476	211.7090	Vinyl Coating Line
477	211.7110	Volatile Organic Liquid (VOL)
478	211.7130	Volatile Organic Material Content (VOMC)
479	211.7150	Volatile Organic Material (VOM) or Volatile Organic Compound (VOC)
480	211.7170	Volatile Petroleum Liquid
481	211.7190	Wash Coat
482	211.7200	Washoff Operations
483	211.7210	Wastewater (Oil/Water) Separator
484	211.7230	Weak Nitric Acid Manufacturing Process
485	211.7250	Web
486	211.7270	Wholesale Purchase – Consumer
487	211.7290	Wood Furniture
488	211.7310	Wood Furniture Coating
489	211.7330	Wood Furniture Coating Line
490	211.7350	Woodworking
491	211.7400	Yeast Percentage

492		
493	211.APPENDIX A	Rule into Section Table
494	211.APPENDIX B	Section into Rule Table

495

496 AUTHORITY: Implementing Sections 9, 9.1, 9.9 and 10 and authorized by Sections 27 and 28
 497 of the Environmental Protection Act [415 ILCS 5/9, 9.1, 9.9, 10, 27 and 28].

498

499 SOURCE: Adopted as Chapter 2: Air Pollution, Rule 201: Definitions, R71-23, 4 PCB 191,
 500 filed and effective April 14, 1972; amended in R74-2 and R75-5, 32 PCB 295, at 3 Ill. Reg. 5, p.
 501 777, effective February 3, 1979; amended in R78-3 and 4, 35 PCB 75 and 243, at 3 Ill. Reg. 30,
 502 p. 124, effective July 28, 1979; amended in R80-5, at 7 Ill. Reg. 1244, effective January 21,
 503 1983; codified at 7 Ill. Reg. 13590; amended in R82-1 (Docket A) at 10 Ill. Reg. 12624, effective
 504 July 7, 1986; amended in R85-21(A) at 11 Ill. Reg. 11747, effective June 29, 1987; amended in
 505 R86-34 at 11 Ill. Reg. 12267, effective July 10, 1987; amended in R86-39 at 11 Ill. Reg. 20804,
 506 effective December 14, 1987; amended in R82-14 and R86-37 at 12 Ill. Reg. 787, effective
 507 December 24, 1987; amended in R86-18 at 12 Ill. Reg. 7284, effective April 8, 1988; amended
 508 in R86-10 at 12 Ill. Reg. 7621, effective April 11, 1988; amended in R88-23 at 13 Ill. Reg.
 509 10862, effective June 27, 1989; amended in R89-8 at 13 Ill. Reg. 17457, effective January 1,
 510 1990; amended in R89-16(A) at 14 Ill. Reg. 9141, effective May 23, 1990; amended in R88-
 511 30(B) at 15 Ill. Reg. 5223, effective March 28, 1991; amended in R88-14 at 15 Ill. Reg. 7901,
 512 effective May 14, 1991; amended in R91-10 at 15 Ill. Reg. 15564, effective October 11, 1991;
 513 amended in R91-6 at 15 Ill. Reg. 15673, effective October 14, 1991; amended in R91-22 at 16
 514 Ill. Reg. 7656, effective May 1, 1992; amended in R91-24 at 16 Ill. Reg. 13526, effective August
 515 24, 1992; amended in R93-9 at 17 Ill. Reg. 16504, effective September 27, 1993; amended in
 516 R93-11 at 17 Ill. Reg. 21471, effective December 7, 1993; amended in R93-14 at 18 Ill. Reg.

517 1253, effective January 18, 1994; amended in R94-12 at 18 Ill. Reg. 14962, effective September
 518 21, 1994; amended in R94-14 at 18 Ill. Reg. 15744, effective October 17, 1994; amended in
 519 R94-15 at 18 Ill. Reg. 16379, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg.
 520 16929, effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg.
 521 6823, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7344, effective May 22, 1995;
 522 amended in R95-2 at 19 Ill. Reg. 11066, effective July 12, 1995; amended in R95-16 at 19 Ill.
 523 Reg. 15176, effective October 19, 1995; amended in R96-5 at 20 Ill. Reg. 7590, effective May
 524 22, 1996; amended in R96-16 at 21 Ill. Reg. 2641, effective February 7, 1997; amended in R97-
 525 17 at 21 Ill. Reg. 6489, effective May 16, 1997; amended in R97-24 at 21 Ill. Reg. 7695,
 526 effective June 9, 1997; amended in R96-17 at 21 Ill. Reg. 7856, effective June 17, 1997;
 527 amended in R97-31 at 22 Ill. Reg. 3497, effective February 2, 1998; amended in R98-17 at 22 Ill.
 528 Reg. 11405, effective June 22, 1998; amended in R01-9 at 25 Ill. Reg. 108, effective December
 529 26, 2000; amended in R01-11 at 25 Ill. Reg. 4582, effective March 15, 2001; amended in R01-17
 530 at 25 Ill. Reg. 5900, effective April 17, 2001; amended in R05-16 at 29 Ill. Reg. 8181, effective
 531 May 23, 2005; amended in R05-11 at 29 Ill. Reg. 8892, effective June 13, 2005; amended in
 532 R04-12/20 at 30 Ill. Reg. 9654, effective May 15, 2006; amended in R07-18 at 31 Ill. Reg.
 533 14254, effective September 25, 2007; amended in R08-6 at 32 Ill. Reg. 1387, effective January
 534 16, 2008; amended in R08-19 at 33 Ill. Reg. _____, effective _____.

535
 536 **SUBPART B: DEFINITIONS**

537
 538 **Section 211.665 Auxiliary Boiler**

539
 540 "Auxiliary boiler" means, for purposes of Part 217, a boiler that is operated only
 541 when the main boiler or boilers at a source are not in service and is used either to
 542 maintain building heat or to assist in the startup of the main boiler or boilers. This
 543 term does not include emergency or standby units and load shaving units.

544
 545 (Source: Added at 33 Ill. Reg. _____, effective _____)

546
 547 **Section 211.995 Circulating Fluidized Bed Combustor**

548
 549 "Circulating fluidized bed combustor" means, for purposes of Part 217, a
 550 fluidized bed combustor in which the majority of the fluidized bed material is
 551 carried out of the primary combustion zone and is transported back to the primary
 552 zone through a recirculation loop.

553
 554 (Source: Added at 33 Ill. Reg. _____, effective _____)

555
 556 **Section 211.1315 Combustion Tuning**

557
 558 "Combustion tuning" means, for purposes of Part 217, review and adjustment of a
 559 combustion process to maintain combustion efficiency of an emission unit, as

560 performed in accordance with procedures provided by the manufacturer or by a
561 trained technician.

562
563 (Source: Added at 33 Ill. Reg. _____, effective _____)
564

565 **Section 211.1435 Container Glass**

566
567 "Container glass" means, for purposes of Part 217, glass made of soda-lime
568 recipe, clear or colored, that is pressed or blown, or both, into bottles, jars,
569 ampoules, and other products listed in Standard Industrial Classification 3221.

570
571 (Source: Added at 33 Ill. Reg. _____, effective _____)
572

573 **Section 211.2355 Flare**

574
575 "Flare" means an open combustor without enclosure or shroud.

576
577 (Source: Added at 33 Ill. Reg. _____, effective _____)
578

579 **Section 211.2357 Flat Glass**

580
581 "Flat glass" means, for purposes of Part 217, glass made of soda-lime recipe and
582 produced into continuous flat sheets and other products listed in Standard
583 Industrial Classification 3211.

584
585 (Source: Added at 33 Ill. Reg. _____, effective _____)
586

587 **Section 211.2625 Glass Melting Furnace**

588
589 "Glass melting furnace" means, for purposes of Part 217, a unit comprising a
590 refractory vessel in which raw materials are charged and melted at high
591 temperature to produce molten glass.

592
593 (Source: Added at 33 Ill. Reg. _____, effective _____)
594

595 **Section 211.3100 Industrial Boiler**

596
597 "Industrial boiler" means, for purposes of Part 217, an enclosed vessel in which
598 water is heated and circulated either as hot water or as steam for heating or for
599 power, or both. This term does not include a heat recovery steam generator that
600 captures waste heat from a combustion turbine and boilers serving a generator that
601 has a nameplate capacity greater than 25 MWe and produces electricity for sale,

602 and cogeneration units, if such boilers meet the applicability criteria under
603 Subpart M of Part 217.

604
605 (Source: Added at 33 Ill. Reg. _____, effective _____)
606

607 **Section 211.3355 Lime Kiln**

608
609 "Lime kiln" means, for purposes of Part 217, an enclosed combustion device used
610 to calcine lime mud, which consists primarily of calcium carbonate, into calcium
611 oxide.

612
613 (Source: Added at 33 Ill. Reg. _____, effective _____)
614

615 **Section 211.3475 Load Shaving Unit**

616
617 "Load shaving unit" means, for purposes of Part 217, a device used to generate
618 electricity for sale or use during high electric demand days, including but not
619 limited to stationary reciprocating internal combustion engines or turbines.

620
621 (Source: Added at 33 Ill. Reg. _____, effective _____)
622

623 **Section 211.4280 Other Glass**

624
625 "Other glass" means, for purposes of Part 217, glass that is neither container glass,
626 as that term is defined in Section 211.1435, nor flat glass, as that term is defined
627 in Section 211.2357.

628
629 (Source: Added at 33 Ill. Reg. _____, effective _____)
630

631 **Section 211.5195 Process Heater**

632
633 "Process heater" means, for purposes of Part 217, an enclosed combustion device
634 that burns gaseous or liquid fuels only and that indirectly transfers heat to a
635 process fluid or a heat transfer medium other than water. This term does not
636 include pipeline heaters and storage tank heaters that are primarily meant to
637 maintain fluids at a certain temperature or viscosity.

638
639 (Source: Added at 33 Ill. Reg. _____, effective _____)

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NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: Nitrogen Oxides Emissions

2) Code Citation: 35 Ill. Adm. Code 217

<u>Section Numbers:</u>	<u>Proposed Action:</u>
217.100	Amended
217.104	Amended
217.121	Repealed
217.141	Amended
217.150	New Section
217.152	New Section
217.154	New Section
217.155	New Section
217.156	New Section
217.157	New Section
217.158	New Section
217.160	New Section
217.162	New Section
217.164	New Section
217.165	New Section
217.166	New Section
217.180	New Section
217.182	New Section
217.184	New Section
217.185	New Section
217.186	New Section
217.200	New Section
217.202	New Section
217.204	New Section
217.220	New Section
217.222	New Section
217.224	New Section
217.240	New Section
217.242	New Section
217.244	New Section
217.340	New Section
217.342	New Section
217.344	New Section
217.345	New Section
217.APPENDIX H	New Section

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Pollution Control Board

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- 4) Statutory Authority: Implementing Section 10 and authorized by Sections 27 and 28 of the Environmental Protection Act [415 ILCS 5/10, 27, and 28]
- 5) A Complete Description of the Subjects and Issues Involved: The Board's May 7, 2009 opinion and order (Amendments to 35 Ill. Adm. Code 217, Nitrogen Oxides Emissions, and 35 Ill. Adm. Code 211, R08-19, slip op. at 27-58 (summarizing twelve proposed new definitions)) discusses in details the amendments to Part 217 proposed in this rulemaking.

This rulemaking is based on a proposal filed with the Board by the Illinois Environmental Protection Agency (Agency) on May 9, 2008. The Agency proposes to amend Parts 211 and 217 of the Board's air pollution regulations (35 Ill. Adm. Code 211, 217) to control nitrogen oxides (NO_x) emissions from major stationary sources in the nonattainment areas and from emission units including industrial boilers, process heaters, glass melting furnaces, cement kilns, lime kilns, furnaces used in steelmaking and aluminum melting, and fossil fuel-fired stationary boilers at such sources.

On April 2, 2009, the Board granted the Agency's motion to expedite review of this proposal in order to meet federal deadlines for submission of State Implementation Plans for NO_x. In its May 7, 2009, opinion and order, the Board stated that, having granted the motion for expedited review, it is highly unlikely to grant any motion for an extension of the first-notice comment period. The Board strongly encouraged participants who wish to file a public comment to do so within the statutory 45-day period.

- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: The Agency stated that it relied on the following 68 sources in preparing its proposal to the Board:
1. The Clean Air Act, as amended in 1990 (42 USC 7401 *et seq.*);
 2. Illinois Environmental Protection Act (415 ILCS 5);
 3. Energy & Environmental Analysis, Inc., "Characterization of the U.S. Boiler Industrial Commercial Boiler Population", submitted to Oak Ridge National Laboratory, May 2005;
 4. [http://commons.wikimedia.org/wiki/Image:Water tube boiler schematic.png](http://commons.wikimedia.org/wiki/Image:Water_tube_boiler_schematic.png);
 5. [http://en.wikipedia.org/wiki/Image:Locomotive fire tube boiler schematic.png](http://en.wikipedia.org/wiki/Image:Locomotive_fire_tube_boiler_schematic.png);

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6. Babcock & Wilcox Company; Steam, It's Generation and Use, 40th Edition, 1992;
7. Neil Johnson, "Fundamentals of Stoker Fired Boiler Design and Operation", presented at CIBO Emission Controls Technology Conference, July 15-17, 2002;
8. Letter to Mr. Regulator, New Hampshire Division of Environmental Services, from Daniel J. Willems, Product Development, Cleaver Brooks, dated May 19, 2006;
9. http://www1.eere.energy.gov/industry/bestpractices/pdfs/steam4_boiler_efficiency.pdf;
10. http://www.energysolutionscenter.org/boilerburner/Eff_Improve/Efficiency/Oxygen_Control.asp;
11. <http://files.asme.org/asmeorg/Codes/CertifAccred/Personnel/2971.pdf>;
12. http://www.coen.com/i_html/white_lowcostnoxpm.html;
13. Rajani Varagani (n.d.), "A Cost Effective Low NO_x Retrofit Technology for Industrial Boilers", cited within CIBO Industrial Emissions Control Technology III, August 1-3, 2005;
14. Email from Jim Staudt, Andover Technology, to R. Gifford Broderick, Combustion Components Associates, Based on estimate for a 4-burner project, dated October 16, 2003;
15. http://www.johnzink.com/products/burners/html_todd/burn_todd_cs_104.htm;
16. Sacramento General Services Heating Plant Case Study: COEN web site: <http://www.coen.com/mrktli/ibrochures/pdf/qla.pdf>;
17. Zink, John (2003) "U.S. Borax TODD Ultra Low Emissions Burner Installment";
18. Zink, John (2003) "TODD Ultra Low Emissions Burner Installment";
19. Coen Company, "Ultra Low NO_x Gas-Fired Burner with Air Preheat", Final Report, prepared for California Air Resources Board, November 23, 2000;
20. Memorandum from Jim Staudt, Andover Technology Partners, to Sikander Khan,

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United States Environmental Protection Agency, providing comments in response to September 10, 2003 email, dated October 24, 2003;

21. Memorandum from Chad Whiteman, Institute of Clean Air Companies to Christopher Recchia, Ozone Transport Commission, regarding Selective Non-Catalytic Reduction Technology Costs for Industrial Sources, dated October 6, 2006;
22. Northeast States for Coordinated Air Use Management (NESCAUM), "Status Report on NO_x: Control Technologies and Cost Effectiveness for Utility Boilers", prepared by Jim Staudt, Andover Technology Partners, June 1998;
23. Northeast States for Coordinated Air Use Management (NESCAUM), "Status Report on NO_x Controls", prepared by Jim Staudt, Andover Technology Partners, December 2000 ("NESCAUM 2000 report");
24. Institute to Clean Air Companies, Inc., "White Paper: Selective Catalytic Reduction (SCR) Control of NO_x Emissions", November 1997;
25. <http://www.cormetech.com/experience.htm>;
26. "Economic Indicators", Chemical Engineering, p. 102, September 2006;
27. Vatatuck, William M., "Updating the CE Plant Cost Index", Chemical Engineering, p. 69, January 2002;
28. State and Territorial Air Pollution (STAPPA) and Association of Local Air Pollution Control Offices (ALAPCO), "Controlling Fine Particulate Matter Under the Clean Air Act: A Menu of Options", March 2006;
29. Erickson, C., and Staudt, J., "Selective Catalytic Reduction System Performance and Reliability Review", presented at the EPRI-EPA-DOE-AWMA Combined Utility Air Pollution Control Conference, the Mega Conference, Baltimore, August 28-31, 2006;
30. Cichanowicz, E.J., "Current Capital Cost and Cost-Effectiveness of Power Plant Emissions Control Technologies", prepared for Utility Air Regulatory Group, June 2007.
31. <http://www.mobotecusa.com/projects/vermillion-sellsheet.pdf>;

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32. <http://www.mobotecusa.com/projects/capefear6-sellsheet.pdf>;
33. STAPPA/ALAPCO, "Controlling Nitrogen Oxides under the Clean Air Act: A Menu of Options", July 1994;
34. Khan, Sikander, United States Environmental Protection Agency, "Methodology, Assumptions, and References Preliminary NO_x Controls Cost Estimates for Industrial Boilers", October-November 2003;
35. MACTEC Federal Programs/MACTEC Engineering and Consulting, Inc., "Midwest Regional Planning Organization (RPO): Petroleum Refinery Best Available Retrofit Technology (BART)", Engineering Analysis, prepared for The Lake Michigan Air Directors Consortium (LADCO), March 30, 2005. ("LADCO 2005");
36. http://www.epa.gov/air/ozonepollution/SIPToolkit/documents/stationary_nox_list.pdf;
37. http://www.callidus.com/pages/next_gen.htm;
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39. http://www.andovertechnology.com/HGA_Market_Report_secure.pdf;
40. <http://vwww.valleyair.org/rules/currntrules/r4304.pdf>;
41. www.perf.org/ppt/Bishop.ppt;
42. State of New Jersey Department of Environmental Protection, State of the Art Manual for Boilers and Process Heaters, July 1997 (revised February 22, 2004). www.state.nj.us/dep/aqpp/downloads/sota/sota12.pdf;
43. Partha Ganguli, Workgroup Recommendations and Other Potential Control Measures Stationary Combustion Sources Workgroup, May 11, 2006. http://www.nj.gov/dep/airworkgroups/docs/wps/SCS004A_fin.pdf;
44. Sun, W.H., Bisnett, M.J., et al., "Reduction of NO_x Emissions from Cement Kiln/Calcliner through the Use of the NO_xOUT Process", International Specialty

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47. Sabo, E., MACTEC Federal Programs, Inc., "Candidate Control Measures for Cement Plants", LADCO/MRPO, Regional Air Quality Workshop, June 28, 2005;
48. United States Environmental Protection Agency, Office of Air Quality, Planning and Standards, Technical Bulletin: Nitrogen Oxides (NO_x), Why and How They Are Controlled, EPA-456/F-99-006R, November 1999.
<http://www.epa.gov/ttn/catc/dir1/fnoxdoc.pdf>;
49. Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone, Rule, 63 Fed. Reg. 57356, October 27, 1998;
50. State of Michigan v. USEPA, 213 F.3d 663 (D.C. Cir. 2000);
51. Federal Implementation Plans to Reduce the Regional Transport of Ozone; Proposed Rule, 63 Fed. Reg. 56394, October 21, 1998;
52. United States Environmental Protection Agency, Office of Air and Radiation, Regulatory Impact Analysis for the NO_x SIP Call, FIP, and Section 126 Petitions, Volume 1: Costs and Economic Impacts, September 1998;
53. Waible, R., Price, D., Tish, P., Halpern, M., "Advanced Burner Technology for Stringent NO_x Regulations", presented at the American Petroleum Institute Midyear Refining Meeting, Orlando, FL, May 8, 1990;
54. Nguyen, Quang, Koppang, Richard, Energy and Environmental Research Corporation, Advanced Steel Reheat Furnaces Research and Development, Final Report, prepared for U.S. Department of Energy, January 14, 1999;
55. Rowlan, Steven J. and Sun, William H., "NO_x Control on Preheat and Radiant Furnaces at Nucor Steel Mills through Urea SNCR, SCR, and Hybrid Processes",

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 60. Midwest RPO Candidate Control Measures, Interim White Paper, Source Category: Glass Manufacturing, December 2, 2005;
 61. Energetics, Inc., Energy and Environmental Profile of the U.S. Aluminum Industry, prepared for U.S. Department of Energy, July 1997;
 62. <http://www1.eere.energy.gov/industry/aluminum/pdfs/aluminum.pdf>;
 63. Schalles, David G., The Next Generation of Combustion Technology for Aluminum Melting, undated. <http://www.bloomeng.com/tmspaper-FINAL.doc>;
 64. <http://www.bloomeng.com/11501umiflame.pdf>;
 65. <http://www.eere.energy.gov/industry/combustion/pdfs/oscllcomb.pdf>;
 66. California South Coast Rule 2002, Allocations for oxides of Nitrogen (NO_x) and oxides of Sulfur (SO_x), amended January 7, 2005;
 67. <http://www.epa.gov/ttn/emc/cem.html>; and
 68. Alternative Control Techniques Document- – NO_x Emissions from Cement Manufacturing, EPA-453/R-94-004, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, March 1994.
- 7) Will this rulemaking replace any emergency rulemaking currently in effect? No

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- 8) Does this rulemaking contain an automatic repeal date? No
- 9) Does this rulemaking contain incorporations by reference? Yes. See 35 Ill. Adm. Code 217.104 (incorporating 11 sources).
- 1) 40 CFR 60, Appendix A, Methods 1, 2, 3, and 4 (2007);
 - 2) Alternative Control Techniques Document – NO_x Emissions from Industrial/Commercial/Institutional (ICI) Boilers, EPA-453/R-94-022, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, March 1994;
 - 3) Alternative Control Techniques Document – NO_x Emissions from Process Heaters (Revised), EPA-453/R-93-034, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, September 1993;
 - 4) Alternative Control Techniques Document – NO_x Emissions from Glass Manufacturing, EPA-453/R-94-037, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, June 1994; and
 - 5) Alternative Control Techniques Document – NO_x Emissions from Iron and Steel Mills, EPA-453/R-94-065, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, September 1994.
- 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> |
|-------------------------|-------------------------|------------------------------------|
| 217.386 | Amend | 32 Ill. Reg. 17075 (Oct. 31, 2008) |
| 217.392 | Amend | 32 Ill. Reg. 17075 (Oct. 31, 2008) |
| 217.396 | Amend | 32 Ill. Reg. 17075 (Oct. 31, 2008) |
- 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)].

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- 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 45 days after the date of publication in the *Illinois Register*. Comments should reference Docket R08-19 and be addressed to:

Clerk's Office
Illinois Pollution Control Board
100 W. Randolph St., Suite 11-500
Chicago, IL 60601

Interested persons may request copies of the Board's opinion and order by calling the Clerk's office at 312/814-3620, or download from the Board's Web site at www.ipcb.state.il.us.

For more information, contact Tim Fox at 312/814-6085 or email at foxt@ipcb.state.il.us.

- 13) Initial Regulatory Flexibility Analysis:
- A) Types of small businesses, small municipalities and not for profit corporations affected: None expected
 - B) Reporting, bookkeeping or other procedures required for compliance: The proposed rulemaking requires the owner or operator of an affected source to perform emissions monitoring, complete required tests, and maintain records and make reports as required.
 - C) Types of Professional skills necessary for compliance: No professional skills beyond those currently required by the existing State and federal air pollution control regulations applicable to affected sources will be required.
- 14) Regulatory Agenda on which this rulemaking was summarized: July 2006

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

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

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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—(Repealed)

Section
217.121 New Emission Sources (Repealed)

SUBPART ~~BCC~~: EXISTING FUEL COMBUSTION EMISSION UNITS—SOURCES—

Section
217.141 Existing Emission Units—Sources in Major Metropolitan Areas

SUBPART CD: NOx GENERAL REQUIREMENTS

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217.150 Applicability
217.152 Compliance Date
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217.155 Initial Compliance Certification
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SUBPART ~~DE~~: INDUSTRIAL BOILERS

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217.164 Emissions Limitations
217.165 Combination of Fuels
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SUBPART EF: PROCESS HEATERS

Section
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SUBPART FG: GLASS MELTING FURNANCES

Section

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217.202 Exemptions
217.204 Emissions Limitations

SUBPART GH: CEMENT AND LIME KILNS

Section

217.220 Applicability
217.222 Exemptions
217.224 Emissions Limitations

SUBPART HI: 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
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SUBPART T: CEMENT KILNS

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217.400 Applicability
217.402 Control Requirements
217.404 Testing
217.406 Monitoring

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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
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217.478 Opt-In Budget Units: Withdrawal from NOx Trading Program
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SUBPART V: ELECTRIC POWER GENERATION

Section

217.521 Lake of Egypt Power Plant
217.700 Purpose
217.702 Severability
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SUBPART W: NOx TRADING PROGRAM FOR
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217.750 Purpose
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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
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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
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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
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~~217.825~~217.825 Calculation of Creditable NOx Emission Reductions
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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: Implementing Sections 9.9 and 10 and authorized by Sections 27 and 28 of the Environmental Protection Act [415 ILCS 5/9.9, 10, 27 and 28].

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

SUBPART A: GENERAL PROVISIONS

Section 217.100 Scope and Organization

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

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

Section 217.104 Incorporations by Reference

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

a) The phenol disulfonic acid procedures, as published in 40 CFR 60, Appendix A, Method 7 (2000);

b) 40 CFR 96, subparts B, D, G, and H (1999);

c) 40 CFR 96.1 through 96.3, 96.5 through 96.7, 96.50 through 96.54, 96.55 (a) & (b), 96.56 and 96.57 (1999);

d) 40 CFR 60, 72, 75 & 76 (2006);

e) Alternative Control Techniques Document -- NOx Emissions from Cement Manufacturing, EPA-453/R-94-004, U. S. Environmental Protection Agency-Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, March 1994;

f) Section 11.6, Portland Cement Manufacturing, AP-42 Compilation of Air Emission Factors, Volume 1: Stationary Point and Area Sources, U.S. Environmental Protection Agency-Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, revised January 1995;

g) 40 CFR 60.13 (2001);

h) 40 CFR 60, Appendix A, Methods 3A, 7, 7A, 7C, 7D, 7E, 19, and 20 (2000);

i) ASTM D6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers (2000);

~~h-k~~ Standards of Performance for Stationary Combustion Turbines, 40 CFR 60, Subpart KKKK, 60.4400 (2006); ~~and~~

~~k-l~~ Compilation of Air Pollutant Emission Factors: AP-42, Volume I: Stationary Point and Area Sources (2000), USEPA; ~~=~~

l) 40 CFR 60, Appendix A, Methods 1, 2, 3, and 4 (2007);

m) Alternative Control Techniques Document -- NOx Emissions from Industrial/Commercial/Institutional (ICI) Boilers, EPA-453/R-94-022, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, March 1994;

n) Alternative Control Techniques Document -- NOx Emissions from Process Heaters (Revised), EPA-453/R-93-034, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, September 1993;

o) Alternative Control Techniques Document -- NOx Emissions from Glass Manufacturing, EPA-453/R-94-037, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, June 1994; and

p) Alternative Control Techniques Document -- NOx Emissions from Iron and Steel Mills, EPA-453/R-94-065, U. S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, September 1994.

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

SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES ~~(Repealed)~~

Section 217.121 New Emission Sources (Repealed)

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

~~a) For gaseous fossil fuel firing, 0.310 kg/MW-hr (0.20 lbs/mmbtu) of actual heat input;~~

~~b) For liquid fossil fuel firing, 0.464 kg/MW-hr (0.30 lbs/mmbtu) of actual heat input;~~

~~e) For dual gaseous and liquid fossil fuel firing, 0.464 kg/MW-hr (0.30 lbs/mmbtu) of actual heat input;~~

~~d) For solid fossil fuel firing, 1.08 kg/MW-hr (0.7 lbs./mmbtu) of actual heat input;~~

~~e) For fuel combustion emission sources burning simultaneously any combination of solid, liquid and gaseous fossil fuels, an allowable emission rate shall be determined by the following equation:~~

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

~~Where:~~

~~E = Allowable nitrogen oxides emissions rate~~

~~Q = Actual heat input derived from all fossil fuels~~

~~C = Percent of actual heat input derived from gaseous fossil fuel~~

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

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

~~C + L + S = 100.0~~

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

~~Metric English E kg/hr lbs/hr Q MW mmbtu/hr A 0.0230 0.003 B 0.0230 0.003 C 0.0530 0.007~~

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

SUBPART B-C: EXISTING FUEL COMBUSTION EMISSION UNITS ~~SOURCES~~

Section 217.141 Existing Emission Units ~~Sources~~ in Major Metropolitan Areas

No person shall cause or allow the emission of nitrogen oxides into the atmosphere in any one hour period from any existing fuel combustion emission

unit-source with an actual heat input equal to or greater than 73.2 MW (250 mmbtu/hr), located in the Chicago or St. Louis (Illinois) major metropolitan areas to exceed the following limitations:

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

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

Where:

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

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

Metric	English	Ekg/hr	lbs/hr	QMM	Mmbtu	Metric	English	Ekg/hr	lbs/hr	QMM	Mmbtu	hr
A0.0230	0.003											
B0.0230	0.003											
C0.0680	0.009											

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

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

SUBPART C: ~~NOx GENERAL REQUIREMENTS~~ SD: INDUSTRIAL BOILERS

Section 217.150 Applicability

a) Applicability

1) The provisions of this Subpart and Subparts ~~D,~~ E, F, G, H, I, and M of this Part apply to the following:

1A) All sources that are located in either one of the following areas and that emit or have the potential to emit NOx in an amount equal to or greater than 100 tons per year:

Ai) The area composed of the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County; or

Bii) The area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County; and

2B) Any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources described in subsection (a)(1)(A) of this Section that emits NOx in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season.

32) For purposes of this Section, "potential to emit" means the quantity of NOx that potentially could be emitted by a stationary source before add-on controls based on the design capacity or maximum production capacity of the source and 8,760 hours per year or the quantity of NOx that potentially could be emitted by a stationary source as established in a federally enforceable permit.

b) If a source ceases to fulfill the emissions criteria of subsection (a) of this Section, the requirements of this Subpart and Subpart ~~D, E, F, G, H, I~~, or M of this Part continue to apply to any emission unit that was ever subject to the provisions of ~~Subpart D, E, F, G, H, or M of this Part~~ any of those Subparts.

c) The provisions of this Subpart do not apply to afterburners, flares, and incinerators.

d) Where a construction permit, for which the application was submitted to the Agency prior to the adoption of this Subpart, is issued that relies on decreases in emissions of NOx from existing emission units for purposes of netting or emission offsets, such NOx decreases remain creditable notwithstanding any requirements that may apply to the existing emission units pursuant to this Subpart and Subpart ~~D, E, F, G, H, I~~, or M of this Part .

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

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

Section 217.152 Compliance Date

a) Compliance with the requirements of Subparts ~~D, E, F, G, H, I~~ and M by an owner or operator of an emission unit that is subject to ~~Subpart D, E, F, G, H, or I~~ Many of those Subparts is required beginning January 1, 2012.

b) Notwithstanding subsection (a) of this Section, compliance with the requirements of Subpart ~~FG~~ of this Part by an owner or operator of an emission unit subject to Subpart ~~FG~~ 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 of Subpart F of this Part~~ 217.204.

c) Notwithstanding subsection (a) of this Section, the owner or operator of emission units subject to Subpart ~~DE~~ or ~~EF~~ of this Part and located at a petroleum refinery must comply with the requirements of this Subpart and Subpart ~~DE~~ or ~~EF~~ of this Part, as applicable, for those emission units beginning January

1, 2012, except that the owner or operator of emission units listed in Appendix H must comply with the requirements of this Subpart, including the option of demonstrating compliance with the applicable Subpart through an emissions averaging plan under Section 217.158 ~~of this Subpart~~, and Subpart ~~DE~~ or ~~EF~~ 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 ~~DE~~ or ~~EF~~ 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 ~~DE~~ or ~~EF~~ of this Part, as applicable, by the dates set forth in Appendix H.

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

Section 217.154 Performance Testing

a) Performance testing of NOx emissions for emission units constructed on or before July 1, 2011, and subject to Subpart ~~D~~, ~~E~~, F, G, H or HI of this Part must be conducted in accordance with Section ~~217.157 of this Subpart~~ 217.157. 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, 2011, and that are subject to Subpart ~~D~~, ~~E~~, F, G, ~~or 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~~ 217.157. This subsection does not apply to owners and operators of emission units demonstrating compliance through a continuous emissions monitoring system.

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 ~~in writing~~ 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 of this Subpart~~ 217.155.

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

Section 217.155 Initial Compliance Certification

a) By the applicable compliance date set forth under Section ~~217.152 of this Subpart~~ 217.152, an owner or operator of an emission unit subject to Subpart ~~D~~, ~~E~~, F, G, H or HI of this Part who is not demonstrating compliance through the

use of a continuous emissions monitoring system must certify to the Agency that the emission unit will be in compliance with the applicable emissions limitation of Subpart ~~D, E, F, G, H, or HI~~ of this Part beginning on such applicable compliance date. The performance testing certification must include the results of the performance testing performed in accordance with ~~Sections~~Section 217.154(a) and (b) ~~of this Subpart~~ and the calculations necessary to demonstrate that the subject emission unit will be in initial compliance.

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

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

Section 217.156 Recordkeeping and Reporting

a) The owner or operator of an emission unit subject to Subpart ~~D, E, F, G, H, I, or M~~ of this Part must keep and maintain all records used to demonstrate initial compliance and ongoing compliance with the requirements of those Subparts.

1) Except as otherwise provided under this Subpart or Subpart ~~D, E, F, G, H, I, or M~~ of this Part, copies of such records must be submitted by the owner or operator of the source to the Agency within 30 days after receipt of a written request by the Agency.

2) Such records must be kept at the source and maintained for at least five years and must be available for immediate inspection and copying by the Agency.

b) The owner or operator of an emission unit subject to Subpart ~~D, E, F, G, H, I, or M~~ of this Part must maintain records that demonstrate compliance with the requirements of ~~Subpart D, E, F, G, H, or M~~ those Subparts, as applicable, that include the following:

1) Identification, type (e.g., gas-fired), and location of each unit.

2) Calendar date of the record.

3) Monthly, seasonal, and annual operating hours.

4) Type and quantity of each fuel used monthly, seasonally, and annually.

5) Product and material throughput, as applicable.

6) Reports for all applicable emissions tests for NOx conducted on the unit, including results.

7) The date, time, and duration of any startup, shutdown, or malfunction in the operation of any emission unit subject to Subpart ~~D, E~~, F, G, H, I, or M of this Part or any emissions monitoring equipment. The records must include a description of the malfunction and corrective maintenance activity.

8) A log of all maintenance and inspections related to the unit's air pollution control equipment for NOx that is performed on the unit.

9) A log for the NOx monitoring device, if present, including periods when not in service and maintenance and inspection activities that are performed on the device.

10) Identification of time periods for which operating conditions and pollutant data were not obtained by the continuous emissions monitoring system, including the reasons for not obtaining sufficient data and a description of corrective actions taken.

11) If complying with the emissions averaging plan provisions of Section ~~217.158 of this Subpart, 217.158~~, copies of the calculations used to demonstrate compliance with the ozone season and annual control period limitations, noncompliance reports for the ozone season, and ozone and annual control period compliance reports submitted to the Agency.

c) The owner or operator of an industrial boiler subject to Subpart ~~DE~~ of this Part must maintain records in order to demonstrate compliance with the combustion tuning requirements under Section ~~217.166 of this Part, 217.166~~.

d) The owner or operator of a process heater subject to Subpart ~~EF~~ of this Part must maintain records in order to demonstrate compliance with the combustion tuning requirements under Section ~~217.186 of this Part, 217.186~~.

e) The owner or operator of an emission unit subject to Subpart ~~D, E~~, F, G, H, I, or M of this Part must maintain records in order to demonstrate compliance with the testing and monitoring requirements under Section ~~217.157 of this Subpart, 217.157~~.

f) The owner or operator of an emission unit subject to Subpart ~~D, E~~, F, G, H or HI of this Part must provide the following information with respect to performance testing pursuant to Section 217.157:

1) Submit a testing protocol to the Agency at least 60 days prior to testing;

2) Notify the Agency at least 30 days in writing prior to conducting performance testing for NOx emissions and five days prior to such testing;

3) Not later than 60 days after the completion of the test, submit the results of the test to the Agency; and

4) If, after the 30-days' notice for an initially scheduled test is sent, there is a delay (e.g., due to operational problems) in conducting the test as scheduled, the owner or operator of the unit must notify the Agency as soon as practicable of the delay in the original test date, either by providing at least seven days' prior notice of the rescheduled date of the test or by arranging a new test date with the Agency by mutual agreement.

g) The owner or operator of an emission unit subject to Subpart ~~D, E, F, G, H, I,~~ or M of this Part must notify the Agency of any exceedances of an applicable emissions limitation of Subpart ~~D, E, F, G, H, I,~~ or M of this Part by sending the applicable report with an explanation of the causes of such exceedances to the Agency within 30 days following the end of the applicable compliance period in which the emissions limitation was not met.

h) Within 30 days ~~of~~after the receipt of a written request by the Agency, the owner or operator of an emission unit that is exempt from the requirements of Subpart ~~D, E, F, G, H, I,~~ or M of this Part must submit records that document that the emission unit is exempt from those requirements to the Agency.

i) If demonstrating compliance through an emissions averaging plan, by March 1 following the applicable calendar year, the owner or operator must submit to the Agency a report that demonstrates the following:

1) For all units that are part of the emissions averaging plan, the total mass of allowable NOx emissions for the ozone season and for the annual control period;

2) The total mass of actual NOx emissions for the ozone season and annual control period for each unit included in the averaging plan;

3) The calculations that demonstrate that the total mass of actual NOx emissions are less than the total mass of allowable NOx emissions using equations in Section 217.158(f) ~~of this Subpart~~; and

4) The information required to determine the total mass of actual NOx emissions.

j) The owner or operator of an emission unit subject to the requirements of Section 217.157 ~~of this Subpart~~ and demonstrating compliance through the use of a continuous emissions monitoring system must submit to the Agency a report within 30 days after the end of each calendar quarter. This report must include the following:

1) Information identifying and explaining the times and dates when continuous emissions monitoring for NOx was not in operation, other than for purposes of calibrating or performing quality assurance or quality control activities for the monitoring equipment; and

2) An excess emissions and monitoring systems performance report in accordance with the requirements of 40 CFR 60.7(c) and (d) and 60.13, or 40 CFR ~~Part~~ 75, or an alternate procedure approved by the Agency and USEPA.

k) The owner or operator of an emission unit subject to Subpart M of this Part must comply with the compliance certification and recordkeeping and reporting requirements in accordance with 40 CFR ~~Part~~ 96, or an alternate procedure approved by the Agency and USEPA.

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

Section 217.157 Testing and Monitoring

a) Industrial Boilers and Process Heaters

1) The owner or operator of an industrial boiler subject to Subpart ~~DE~~ 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 ~~Part 75~~, as incorporated by reference in Section ~~217.104 of this Part~~.217.104.

2) The owner or operator of an industrial boiler subject to Subpart ~~DE~~ 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 ~~Part 60, Subpart subpart A,~~ and ~~Appendix appendix B,~~ Performance Specifications 2 and 3, and ~~Appendix appendix F,~~ Quality Assurance Procedures, as incorporated by reference in Section ~~217.104 of this Part~~.217.104.

3) The owner or operator of a process heater subject to Subpart ~~EF~~ 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 ~~must monitor emissions of NOx discharged into the atmosphere in~~ accordance with 40 CFR ~~Part 60, Subpart subpart A,~~ and ~~Appendix appendix B,~~ Performance Specifications 2 and 3, and ~~Appendix appendix F,~~ Quality Assurance Procedures, as incorporated by reference in Section ~~217.104 of this Part~~.217.104.

4) If demonstrating compliance through an emissions averaging plan, the owner or operator of an industrial boiler subject to Subpart ~~DE~~ of this Part, or a process heater subject to Subpart ~~EF~~ 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 of this Subpart~~.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, ~~of this Part,~~ the owner or operator of an industrial boiler or process heater must, at his or her own expense, have such test conducted in accordance with the applicable test methods and procedures specified in this Section within 90 days ~~of 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 ~~Part 60, Subpart subpart A,~~ and ~~Appendix appendix A,~~ Method 1, 2, 3, 4, 7E, or 19, as incorporated by reference in Section ~~217.104 of this Part~~.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. NOx 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) ~~of this Section~~ 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 subsections (a)(4), (a)(4)(A), and (a)(4)(B) of this Section, an owner or operator of an industrial boiler subject to Subpart ~~DE~~ of this Part, or a process heater subject to Subpart ~~EF~~ 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 ~~Part 60, Subpart subpart A, and Appendix appendix B, Performance Specifications 2 and 3, and Appendix appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104 of this Part. 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 ~~DE~~ 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 NOx emissions discharged into the atmosphere, but must comply with the performance test requirements under subsections (a)(4), (a)(4)(A), and (a)(4)(B) 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 ~~FG~~ of this Part, cement kiln or lime kiln subject to Subpart ~~GH~~ of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart ~~HI~~ of this Part, or aluminum reverberatory or crucible furnace subject to Subpart ~~HI~~ of this Part that has the potential to emit NOx 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 NOx emissions discharged into the atmosphere in accordance with 40 CFR ~~Part 60, Subpart subpart A, and Appendix appendix B, Performance Specifications 2 and 3, and Appendix appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104 of this Part. 217.104.~~

2) An owner or operator of a glass melting furnace subject to Subpart ~~FG~~ of this Part, cement kiln or lime kiln subject to Subpart ~~GH~~ of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart ~~HI~~ of this Part, or aluminum reverberatory or crucible furnace subject to Subpart ~~HI~~ of this Part that has the potential to emit NOx 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 of this Subpart. 217.154.~~

3) An owner or operator of a glass melting furnace subject to Subpart ~~FG~~ of this Part, cement kiln or lime kiln subject to Subpart ~~GH~~ of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart ~~HI~~ of this Part, or aluminum reverberatory or crucible furnace subject to Subpart ~~HI~~ of

this Part that has the potential to emit NOx 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 ~~FG~~ of this Part, cement kilns or lime kilns subject to Subpart ~~GH~~ of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart ~~HI~~ of this Part, or aluminum reverberatory or crucible furnaces subject to Subpart ~~HI~~ 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, 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 ~~of~~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 ~~Part-60, Subpart~~subpart ~~A-~~ and ~~Appendix~~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 ~~Part-60, Subpart~~subpart ~~A-~~ and ~~Appendix~~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. NOx 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) ~~of this Section~~ 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 ~~FG~~ of this Part, cement kiln or lime kiln subject to Subpart ~~GH~~ of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart ~~HI~~ of this Part, or aluminum reverberatory or crucible furnace subject to Subpart ~~HI~~ 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 ~~Part-60, Subpart~~subpart ~~A-~~ and ~~Appendix~~appendix B, Performance Specifications 2 and 3, and ~~Appendix~~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 Part ~~96~~, ~~Subpart~~subpart H.

d) Common Stacks. If two or more emission units subject to Subpart ~~D~~, 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 ~~D~~, E, F, G, H, I, M, or Q of this Part that share the common stack, provided such emission units are subject to an emissions averaging plan under this Part.

e) Compliance with the continuous emissions monitoring system (CEMS) requirements by an owner or operator of an emission unit who is required to install, calibrate, maintain, and operate a CEMS on the emission unit under subsection (a)(1), (a)(2), (a)(3), or (b)(1) of this Section, or who has elected to comply with the CEMS requirements under subsection (a)(5) or (b)(5) of this Section, or who has elected to comply with the predictive emission monitoring system (PEMS) requirements under subsection (f) of this Section, is required by the following dates:

1) For the owner or operator of an emission unit that is subject to a compliance date in calendar year 2012 under Section ~~217.152 of this~~ ~~Subpart, 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 ~~another~~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 Part ~~60~~, ~~Subpart~~subpart A, and ~~Appendix~~appendix B, Performance Specification 16. The PEMS must be used to demonstrate compliance with the applicable emissions limitation or emissions averaging plan on an ozone season and annual basis.

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

Section 217.158 Emissions Averaging Plans

a) Notwithstanding any other emissions averaging plan provisions under this Part, an owner or operator of a source with certain emission units subject to Subpart ~~D~~, 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) or (B) ~~of this Subpart~~, 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~~, 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~~, 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 such order allows for emissions averaging.

b) An owner or operator must submit an emissions averaging plan to the Agency by January 1, 2012. The plan must include, but is not limited to, the following:

1) The list of affected units included in the plan by unit identification number; and

2) A sample calculation demonstrating compliance using the methodology provided in subsection (f) of this Section for the ozone season (May 1 through September 30) and calendar year (January 1 through December 31).

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 ~~of~~after such occurrence, an updated emissions averaging plan; or

2) If a unit that was exempt from the requirements of Subpart ~~D, 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, 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 ~~of~~after the unit no longer ~~qualifying~~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 of this Subpart, 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) ~~of this Subpart.~~

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:

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

Where:

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

$N_{all} = \sum_{k=1}^n \sum_{j=1}^m E_{all}(j)_{k,j}$ 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).
 $N_{all} = \sum_{k=1}^n \sum_{j=1}^m E_{all}(j)_{k,j}$ 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).
 $E_{act}(i)_{k,j}$ Total mass of actual ~~NOx~~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. ~~EMall(i)~~ = EMall(i) = 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~~ determine actual and allowable NOx emissions using the following equations:

- 1) Actual emissions must be determined as follows:

$$\text{Eact}(i) = \text{Eact}(i) \times \frac{H_i}{2000}$$

When emission limits are prescribed in lb/mmBtu,

≡

$$\text{Eact}(i) = \text{Eact}(i) \times \frac{P_i}{2000}$$

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,

≡

$$\text{EMall}(i) = \text{Eall}(i) \times \frac{H_i}{2000}$$

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

$$\text{EMall}(i) = \text{Eall}(i) \times \frac{P_i}{2000}$$

≡

Where:

~~EMact(i)~~ = EMact(i) = Total mass of actual NOx emissions in tons for a unit. ~~EMall(i)~~ = EMall(i) = Total mass of allowable NOx emissions in tons for a unit. ~~Eact~~ = Eact = 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.

~~Eall~~ = Eall = 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, ~~of this Part~~. For an affected industrial boiler subject to Subpart ~~DE~~ of this Part, or process heater subject to Subpart ~~EF~~ 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 of this Part~~, 217.104, or an uncontrolled NOx emission rate as determined by an alternative method approved by the Agency, will be used.

~~H~~ = H = Heat input (mmBtu/ozone season or mmBtu/year) calculated from fuel flow meter and the heating value of the fuel used. ~~P~~ = 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) or (B) 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 of Subpart Q of this Part, 217.390~~, the testing and monitoring requirements under Section ~~217.394 of Subpart Q of this Part, 217.394~~, and the recordkeeping and reporting requirements under Section ~~217.396 of Subpart Q of this Part, 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.—

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

SUBPART ~~DE~~: INDUSTRIAL BOILERS

Section 217.160 Applicability

a) The provisions of Subpart ~~ED~~ of this Part and this Subpart apply to all industrial boilers located at sources subject to this Subpart pursuant to Section ~~217.150 of this Part, 217.150~~, except as provided in subsections (b) and (c) of this Section.

b) The provisions of this Subpart do not apply to boilers serving a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale, and cogeneration units, as that term is defined in Section ~~225.130 of Part 225, 35 Ill. Adm. Code 225.130~~, if such boilers or cogeneration units are subject to the CAIR NOx Trading Programs under 35 Ill. Adm. Code 225.130, Subpart D or E of Part 225.

c) The provisions of this Subpart do not apply to fluidized catalytic cracking units, their regenerator and associated CO boiler or boilers and CO furnace or furnaces where present, if such units are located at a petroleum refinery and such units are required to meet emission limits or control requirements for NOx as provided for in an enforceable order.

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

Section 217.162 Exemptions

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

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

Section 217.164 Emissions Limitations

On and after January 1, 2012, 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.

Emission Rated Heat Input Capacity (mmBtu/hr)	Fuel Input Capacity or Requirement	Unit Type and Requirement	Limitation (lb/mmBtu)	Fuel	NOx Emissions
0.08	or Other Gaseous Fuels	Natural Gas	1) Industrial boiler	greater than 100	Industrial boiler
21000.082)	Industrial boiler	less than or equal to 100	Combustion tuning		
0.10	Distillate Fuel Oil	1) Industrial boiler	greater than 100		
21000.102)	Industrial boiler	less than or equal to 100	Combustion tuning		
0.15	Other Liquid Fuels	1) Industrial boiler	greater than 100		
1000.15	2) Industrial boiler	less than or equal to 100	Combustion tuning		
0.12	Solid Fuel	1) Industrial boiler	greater than 100,		
20.122)	Industrial boiler	greater than 250	0.18		
32500.183)	Industrial boiler	greater than 100 but	0.25	less than or equal	
42500.254)	Industrial boiler	less than or equal to 100	Combustion tuning	Less less	

e) 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:

$$\frac{NOx_{NG} * BTUNG + NOx_{COG} * BTUCOG + NOx_{BFG} * BTUBFG}{(BTUNG + BTUCOG + BTUBFG)}$$

NOx emissions limitation for period in lb/mmBtu =
Where:

Where:— ~~NO_xNG~~ = $\frac{0.084 \text{ lb/MMBtu}}{\text{MMBtu}}$ for natural gas — ~~BTUNG~~ = $\frac{\text{BTU}}{\text{MMBtu}}$ the heat input of natural gas in ~~BTU~~ over that period — ~~NO_xCOG~~ = $\frac{0.144 \text{ lb/MMBtu}}{\text{MMBtu}}$ for coke oven gas — ~~BTUCOG~~ = $\frac{\text{BTU}}{\text{MMBtu}}$ the heat input of coke oven gas in ~~BTU~~ over that period — ~~NO_xBFG~~ = $\frac{0.0288 \text{ lb/MMBtu}}{\text{MMBtu}}$ for blast furnace gas — ~~BTUBFG~~ = $\frac{\text{BTU}}{\text{MMBtu}}$ the heat input of blast furnace gas in ~~BTU~~ over that period

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

Section 217.165 Combination of Fuels

The owner or operator of an industrial boiler subject to this Subpart and operated with any combination of fuels must comply with a heat input weighted average emissions limitation to demonstrate compliance with Section ~~217.164 of this Subpart.~~ 217.164.

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

Section 217.166 Methods and Procedures for Combustion Tuning

The owner or operator of an industrial boiler subject to the combustion tuning requirements of Section 217.164 ~~of this Subpart~~ must have combustion tuning performed on the boiler at least annually. The combustion tuning must be performed by an employee of the owner or operator or a contractor who has successfully completed a training course on the combustion tuning of boilers firing the fuel or fuels that are fired in the boiler. The owner or operator must maintain the following records that must be made available to the Agency upon request:

- ~~1a)~~ 1a) The date the combustion tuning was performed;
- ~~2b)~~ 2b) The name, title, and affiliation of the person who performed the combustion tuning;
- ~~3c)~~ 3c) Documentation demonstrating the provider of the combustion tuning training course, the dates the training course was taken, and proof of successful completion of the training course;
- ~~4d)~~ 4d) Tune-up procedure followed and checklist of items (such as burners, flame conditions, air supply, scaling on heating surface, etc.) inspected prior to the actual tune-up; and
- ~~5e)~~ 5e) Operating parameters recorded at the start and at conclusion of combustion tuning.

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

SUBPART ~~EE~~ EE: PROCESS HEATERS

Section 217.180 Applicability

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

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

Section 217.182 Exemptions

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

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

Section 217.184 Emissions Limitations

~~On and after January 1, 2012, no person shall cause or allow emissions of NOx into the~~ On and after January 1, 2012, 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	NOx Emissions Limitation
<u>Fuel</u>	<u>Emission Unit Type and</u>	<u>Limitation</u>
<u>Rated Heat Input Capacity</u>	<u>(lb/mmBtu)</u>	
<u>(mmBtu/hr)</u>	<u>Nox Emissions Limitation (lb/mmBtu) or Requirement</u>	
a) Natural Gas	1) Process heater	0.08
or Other Gaseous Fuels	<u>Process heater</u> greater than 100	
20.082) Process heater	Combustion tuning	
	less than or equal to 100	
b) Combustion tuning	Residual Fuel Oil 1) Process heater	
0.10	greater than 100,	
	natural draft 20.102) Process heater	
0.15	greater than 100,	
	mechanical draft 30.153) Process heater	
Combustion tuning	less than or equal to 100	
c) Combustion tuning	Other Liquid Fuels 1) Process heater	
0.05	greater than 100,	
	natural draft	
20.052) Process heater	0.08	
greater than 100,	mechanical draft <u>0.08</u>	
3) Process heater	Combustion tuning	
	less than or equal to 100 <u>Combustion tuning</u>	

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

Section 217.185 Combination of Fuels

The owner or operator of a process heater subject to this Subpart and operated with any combination of fuels must comply with a heat input weighted average emissions limitation to demonstrate compliance with Section ~~217.184 of this Subpart, 217.184.~~

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

Section 217.186 Methods and Procedures for Combustion Tuning

The owner or operator of a process heater subject to the combustion tuning requirements of Section 217.184 ~~of this Subpart~~ must have combustion tuning performed on the heater at least annually. The combustion tuning must be performed by an employee of the owner or operator or a contractor who has successfully completed a training course on the combustion tuning of heaters firing the fuel or fuels that are fired in the heater. The owner or operator must maintain the following records that must be made available to the Agency upon request:

1a) The date the combustion tuning was performed;

2b) The name, title, and affiliation of the person who performed the combustion tuning;

3c) Documentation demonstrating the provider of the combustion tuning training course, the dates the training course was taken, and proof of successful completion of the training course;

4d) Tune-up procedure followed and checklist of items (such as burners, flame conditions, air supply, scaling on heating surface, etc.) inspected prior to the actual tune-up; and

5e) Operating parameters recorded at the start and at conclusion of combustion tuning.

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

SUBPART ~~FG~~: GLASS MELTING FURNACES

Section 217.200 Applicability

The provisions of Subpart ~~GD~~ of this Part and this Subpart apply to all glass melting furnaces located at sources subject to this Subpart pursuant to Section ~~217.150 of this Part, 217.150.~~

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

Section 217.202 Exemptions

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

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

Section 217.204 Emissions Limitations

a) On and after January 1, 2012, 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.

NOx

<u>Product</u>	<u>Emission Unit Type</u>	<u>Nox Emissions Limitation</u> (lb/ton glass produced)
1) Container Glass	melting furnace	5.0
Flat Glass	melting furnace	25.02
Other Glass	melting furnace	7.9 - 37.93
		11.0

b) The emissions limitations under this Section do not apply during glass melting furnace startup (not to exceed 70 days) or idling (operation at less than 35% of furnace capacity). For the purposes of demonstrating seasonal and annual compliance, the emissions limitation during such periods shall be calculated as follows:

NOx emissions limitation (lb/day) = $\frac{(ANL)}{(PPC)}$

Where: ANL = The applicable NOx emissions limitation (lb/day) = $\frac{(ANL)}{(PPC)}$

Where:

ANL=The applicable NOx emissions limitation under this Section in pounds per ton of glass produced
PPC= Permitted production capacity in tons of glass produced per day

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

SUBPART GH: CEMENT AND LIME KILNS

Section 217.220 Applicability

a) Notwithstanding Subpart T of this Part, the provisions of Subpart ED of this Part and this Subpart apply to all cement kilns located at sources subject to this Subpart pursuant to Section ~~217.150 of this Part~~, 217.150.

b) The provisions of Subpart ED of this Part and this Subpart apply to all lime kilns located at sources subject to this Subpart pursuant to Section ~~217.150 of this Part~~, 217.150.

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

Section 217.222 Exemptions

Notwithstanding Section ~~217.220 of this Subpart~~, 217.220, the provisions of this Subpart do not apply to a cement kiln or lime kiln operating under a federally enforceable limit of NOx emissions from such kiln to less than 15 tons per year and less than five tons per ozone season.

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

Section 217.224 Emissions Limitations

a) On and after January 1, 2012, 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.

NOx

<u>Emission Unit Type</u>	<u>Nox Limitation</u> (lb/ton clinker produced)	<u>Nox Emissions</u>	<u>Emission Unit Type</u>
	1)		Long dry kiln
	5.1		
	-25.12)		Short dry kiln 5.1
	-35.13)		Preheater kiln 3.8
43.84)			Preheater/precalciner kiln 2.8

b) On and after January 1, 2012, 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.

NOx

<u>Fuel Type</u>	<u>Emission Unit Type</u>	<u>Nox Limitation</u> (lb/ton lime produced)	<u>Nox Emissions</u>
	1) Gas		Rotary kiln 2.2
	2) Coal		Rotary kiln 2.22
Coal Rotary kiln			2.5

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

SUBPART HI: IRON AND STEEL AND ALUMINUM MANUFACTURING

Section 217.240 Applicability

a) The provisions of Subpart CD of this Part and this Subpart apply to all reheat furnaces, annealing furnaces, and galvanizing furnaces used in iron and steel making located at sources subject to this Subpart pursuant to Section 217.150 of this Part.

b) The provisions of Subpart CD of this Part and this Subpart apply to all reverberatory furnaces and crucible furnaces used in aluminum melting located at sources subject to this Subpart pursuant to Section 217.150 of this Part.

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

Section 217.242 Exemptions

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

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

Section 217.244 Emissions Limitations

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

<u>Emission Unit Type</u>		<u>NOx Emissions</u>	
Limitation (lb/mmBtu)		Emission Unit Type	
regenerative	0.18	1)	Reheat furnace,
20.182)			
furnace, recuperative,	0.142	Reheat furnace, recuperative,	0.09
combustion of		natural gas— 30.093)	
air	0.03	Reheat furnace, cold-	0.078
50.035)		natural gas and coke oven gas	
furnace, recuperative	0.167	Reheat furnace, 0.1424)	0.386
regenerative	0.38	Annealing furnace, regenerative	0.078
6)		Annealing furnace, cold-air	0.078
recuperative	0.16	Galvanizing furnace,	
7)		Annealing	0.469
0.07		Galvanizing furnace, cold-	0.16
		air	0.06
		Galvanizing furnace, regenerative	0.46
		Galvanizing furnace, recuperative	0.16
		Galvanizing furnace, cold-air	0.06

b) On and after January 1, 2012, 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.

<u>Emission Unit Type</u>		<u>NOx Emissions</u>	
Limitation (lb/mmBtu)		Emission Unit Type	
furnace	0.08	1)	Reverberatory
25.12)			
		Crucible furnace— 0.165.1	

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

SUBPART M: ELECTRICAL GENERATING UNITS

Section 217.340 Applicability

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

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

Section 217.342 Exemptions

a) Notwithstanding Section ~~217.340 of this Subpart, 217.340.~~ the provisions of ~~this Subpart~~ and this Subpart do not apply to a fossil fuel-fired stationary boiler operating under a federally enforceable limit of NOx emissions from such boiler to less than 15 tons per year and less than five tons per ozone season.

b) Notwithstanding Section ~~217.340 of this Subpart, 217.340.~~ the provisions of this Subpart do not apply to a coal-fired stationary boiler that commenced operation before January 1, 2008, that is complying with ~~the Part 225-35 Ill. Adm. Code 225.~~ Subpart B through the multi-pollutant standard under ~~Section 35 Ill. Adm. Code 225.233 of Part 225 or the combined pollutant standards under 35 Ill. Adm. Code 225.~~ Subpart F ~~of Part 225.~~

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

Section 217.344 Emissions Limitations

On and after January 1, 2012, 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.

NOx Emissions		Fuel Emission Unit Type	NOx Limitation
Emission Unit Type		(lb/mmBtu)	Fuel
a) Solid Boiler	(lb/mmBtu)a)	SolidBoiler0.12	
b) Natural gas Boiler		gasBoiler0.06	
c) Liquid			
1) Boiler that commenced operation before January 1, 2008		0.10	
2) Boiler that commenced operation on or after January 1, 2008		0.08	

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

Section 217.345 Combination of Fuels

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

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

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

ExxonMobil Oil Corporation (Facility ID 197800AAA)

PointEmission Unit DescriptionCompliance Date0019Crude Vacuum Heater (13-B-2)December 31,2014003831, 20140038Alky Iso-Stripper Reboiler (7-B-1)December 31,2014003331, 20140033CHD Charge Heater (3-B-1)December 31,2014003431, 20140034CHD Stripper Reboiler (3-B-2)December 31,2014002131, 20140021Coker East Charge Heater (16-B-1A)December 31,2014002131, 20140021Coker East Charge Heater (16-B-1B)December 31,2014001831, 20140018Crude Atmospheric Heater (1-B-1A)December 31,2014001831, 20140018Crude Atmospheric Heater (1-B-1B)December 31,2014

~~ConocoPhillips Company Wood River Refinery (Facility ID 119090AAA) PointEmission Unit DescriptionCompliance Date 001731, 20140017 BEU HM-1December 31, 20120018BEU HM-2December 31, 20120004 CR-1 Feed Preheat, H-1December 31, 20120005CR-1 1st Interreactor Heater, H-2December 31, 20120009CR-1 3rd Interreactor Heater, H-7December 31, 20120091 CR-3 Charge HeaterDecember 31, 20120092CR-3 1st Reheat Heater, H-5December 31, 20120082Boiler 17December 31, 20120080Boiler 15December 31, 20120073Alky HM-2 HeaterDecember 31, 20120662VF-4 Charge Heater, H-28December 31, 20120664DU-4 Charge Heater, H-24December 31, 20140617DCU Charge Heater, H-20December 31, 20140014HCU Fractionator Reboil, H-3December 31, 20160024DU-1 Primary Heater South, F-301December 31, 20160025DU-1 Secondary Heater North, F-302December 31, 20160081Boiler 16December 31, 20160083Boiler 18December 31, 20160095DHT Charge HeaterDecember 31, 20160028DU-2 Lube Crude Heater, F-200December 31, 20160029DU-2 Mixed Crude Heater West, F-202December 31, 20160030DU-2 Mixed Crude Heater East, F-203December 31, 20160084CR-2 North Heater December 31, 201620160017 BEU HM-1December 31, 2012~~

~~ILLINOIS REGISTER~~

~~ConocoPhillips Company Wood River Refinery (Facility ID 119090AAA)~~

~~POLLUTION CONTROL BOARD~~

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

~~NOTICE OF PROPOSED AMENDMENTS~~

JCAR350217-0906921r01

~~ILLINOIS REGISTER~~

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

Document comparison done by DeltaView on Friday, May 15, 2009 10:16:42 AM

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Document 2	file://Y:/Input/35-217-JCARr01(iss21).doc
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Legend:	
<u>Insertion</u>	
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Deleted cell	
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Split/Merged cell	
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	Count	
Insertions	330	
Deletions	469	
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Moved to	1	
Style change	0	
Format changed	0	
Total changes	801	

1 TITLE 35: ENVIRONMENTAL PROTECTION
2 SUBTITLE B: AIR POLLUTION
3 CHAPTER I: POLLUTION CONTROL BOARD
4 SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS
5 FOR STATIONARY SOURCES
6

7 PART 217
8 NITROGEN OXIDES EMISSIONS
9

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14 217.101 Measurement Methods
15 217.102 Abbreviations and Units
16 217.103 Definitions
17 217.104 Incorporations by Reference
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22 217.121 New Emission Sources (Repealed)
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24 SUBPART C: EXISTING FUEL COMBUSTION EMISSION UNITSSOURCES
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27 217.141 Existing Emission Sources in Major Metropolitan Areas
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29 SUBPART D: NO_x GENERAL REQUIREMENTS
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35 217.155 Initial Compliance Certification
36 217.156 Recordkeeping and Reporting
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46	<u>217.165</u>	<u>Combination of Fuels</u>
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- 130 217.468 New Source Set-Asides for "New" Budget Units
- 131 217.470 Early Reduction Credits (ERCs) for Budget Units
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- 135 217.478 Opt-In Budget Units: Withdrawal from NO_x Trading Program
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- 142 217.521 Lake of Egypt Power Plant
- 143 217.700 Purpose
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- 146 217.706 Emission Limitations
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152 ELECTRICAL GENERATING UNITS

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- 163 217.764 NO_x Allocations for Budget EGUs
- 164 217.768 New Source Set-Asides for "New" Budget EGUs
- 165 217.770 Early Reduction Credits for Budget EGUs
- 166 217.774 Opt-In Units
- 167 217.776 Opt-In Process
- 168 217.778 Budget Opt-In Units: Withdrawal from NO_x Trading Program
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172 SUBPART X: VOLUNTARY NO_x EMISSIONS REDUCTION PROGRAM

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 175 217.800 Purpose
 176 217.805 Emission Unit Eligibility
 177 217.810 Participation Requirements
 178 217.815 NO_x Emission Reductions and the Subpart X NO_x Trading Budget
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 192 217.APPENDIX C Compliance Dates
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 194 217.APPENDIX E Large Non-Electrical Generating Units
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 198 217.APPENDIX H Compliance Dates for Certain Emissions Units at Petroleum Refineries
 199

200 AUTHORITY: Implementing Sections 9.9 and 10 and authorized by Sections 27 and 28 of the
 201 Environmental Protection Act [415 ILCS 5/9.9, 10, 27 and 28].
 202

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

210
 211 SUBPART A: GENERAL PROVISIONS
 212

213 **Section 217.100 Scope and Organization**
 214

- 215 a) This Part sets standards and limitations for emission of oxides of nitrogen from

- 216 stationary sources.
 217
 218 b) Permits for sources subject to this Part may be required pursuant to 35 Ill. Adm.
 219 Code 201 or Section 39.5 of the Act.
 220
 221 c) Notwithstanding the provisions of this Part the air quality standards contained in
 222 35 Ill. Adm. Code 243 may not be violated.
 223
 224 d) These rules have been grouped for convenience of the public; the scope of each is
 225 determined by its language and history.
 226

227 (Source: Amended at 33 Ill. Reg. _____, effective _____)
 228

229 **Section 217.104 Incorporations by Reference**
 230

231 The following materials are incorporated by reference. These incorporations do not include any
 232 later amendments or editions.
 233

- 234 a) The phenol disulfonic acid procedures, as published in 40 CFR 60, Appendix A,
 235 Method 7 (2000);
 236
 237 b) 40 CFR 96, subparts B, D, G, and H (1999);
 238
 239 c) 40 CFR 96.1 through 96.3, 96.5 through 96.7, 96.50 through 96.54, 96.55(a) &
 240 (b), 96.56 and 96.57 (1999);
 241
 242 d) 40 CFR 60, 72, 75 & 76 (2006);
 243
 244 e) Alternative Control Techniques Document – NO_x Emissions from Cement
 245 Manufacturing, EPA-453/R94-004, U.S. Environmental Protection Agency-
 246 Office of Air Quality Planning and Standards, Research Triangle Park, N.C.
 247 27711, March 1994;
 248
 249 f) Section 11.6, Portland Cement Manufacturing, AP-42 Compilation of Air
 250 Emission Factors, Volume 1: Stationary Point and Area Sources, U.S.
 251 Environmental Protection Agency-Office of Air Quality Planning and Standards,
 252 Research Triangle Park, N.C. 27711, revised January 1995;
 253
 254 g) 40 CFR 60.13 (2001);
 255
 256 h) 40 CFR 60, Appendix A, Methods 3A, 7, 7A, 7C, 7D, 7E, 19, and 20 (2000);
 257

- 258 i) ASTM D6522-00, Standard Test Method for Determination of Nitrogen Oxides,
259 Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-
260 Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters
261 Using Portable Analyzers (2000);
- 262
- 263 jk) Standards of Performance for Stationary Combustion Turbines, 40 CFR 60,
264 Subpart KKKK, 60.4400 (2006); and
- 265
- 266 kl) Compilation of Air Pollutant Emission Factors: AP-42, Volume I: Stationary
267 Point and Area Sources (2000), USEPA;:-
- 268
- 269 l) 40 CFR 60, Appendix A, Methods 1, 2, 3, and 4 (2007);
- 270
- 271 m) Alternative Control Techniques Document – NO_x Emissions from
272 Industrial/Commercial/Institutional (ICI) Boilers, EPA-453/R-94-022, U.S.
273 Environmental Protection Agency, Office of Air and Radiation, Office of Air
274 Quality Planning and Standards, Research Triangle Park, N.C. 27711, March
275 1994;
- 276
- 277 n) Alternative Control Techniques Document – NO_x Emissions from Process
278 Heaters (Revised), EPA-453/R-93-034, U.S. Environmental Protection Agency,
279 Office of Air and Radiation, Office of Air Quality Planning and Standards,
280 Research Triangle Park, N.C. 27711, September 1993;
- 281
- 282 o) Alternative Control Techniques Document – NO_x Emissions from Glass
283 Manufacturing, EPA-453/R-94-037, U.S. Environmental Protection Agency,
284 Office of Air and Radiation, Office of Air Quality Planning and Standards,
285 Research Triangle Park, N.C. 27711, June 1994; and
- 286
- 287 p) Alternative Control Techniques Document – NO_x Emissions from Iron and Steel
288 Mills, EPA-453/R-94-065, U.S. Environmental Protection Agency, Office of Air
289 and Radiation, Office of Air Quality Planning and Standards, Research Triangle
290 Park, N.C. 27711, September 1994.

291
292 (Source: Amended at 33 Ill. Reg. _____, effective _____)

293
294 **SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES**

295
296 **Section 217.121 New Emission Sources (Repealed)**

297
298 ~~No person shall cause or allow the emission of nitrogen oxides (NO_x) into the atmosphere in any~~
299 ~~one-hour period from any new fuel combustion emission source with an actual heat input equal~~
300 ~~to or greater than 73.2 MW (250 mmBtu/hr) to exceed the following standards and limitations:~~

- 301
 302 a) For gaseous fossil fuel firing, 0.310 kg/MW-hr (0.20 lbs/mmBtu) of actual heat
 303 input;
 304
 305 b) For liquid fossil fuel firing, 0.464 kg/MW-hr (0.30 lbs/mmBtu) of actual heat
 306 input;
 307
 308 c) For dual gaseous and liquid fossil fuel firing, 0.464 kg/MW-hr (0.30 lbs/mmBtu)
 309 of actual heat input;
 310
 311 d) For solid fossil fuel firing, 1.08 kg/MW-hr (0.7 lbs/mmBtu) of actual heat input;
 312
 313 e) For fuel combustion emission sources burning simultaneously any combination of
 314 solid, liquid and gaseous fossil fuels, an allowable emission rate shall be
 315 determined by the following equation:
 316

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

Where: =

E = Allowable nitrogen oxides emissions rate

Q = Actual heat input derived from all fossil fuels

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

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

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

$$G + L + S = 100.0$$

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

317

	<u>Metric</u>	<u>English</u>
E	Kg/hr	Lbs/hr
Q	MW	MmBtu/hr
A	0.023	0.003
B	0.023	0.003
C	0.053	0.007

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

SUBPART C: EXISTING FUEL COMBUSTION EMISSION UNITSSOURCES

Section 217.141 Existing Emission UnitsSources in Major Metropolitan Areas

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

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

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

Where:

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

	<u>Metric</u>	<u>English</u>
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E	Kg/hr	1ls/hr
Q	MW	Mmbtu/hr
A	0.023	0.003

B	0.023	0.003
C	0.068	0.009

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d) Exceptions: This ~~Section~~ rule shall not apply to the following:

- 1) ~~Existing~~ existing fuel combustion sources ~~that~~ which are either cyclone fired boilers burning solid or liquid fuel, or horizontally opposed fired boilers burning solid fuel; ~~or~~;
- 2) Emission units that are subject to the emissions limitations of Subpart E, F, G, H, I, M, or Q of this Part.

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

SUBPART D: INDUSTRIAL BOILERS

Section 217.150 Applicability

a) Applicability

1) The provisions of this Subpart and Subparts E, F, G, H, I, and M of this Part apply to the following:

A) All sources that are located in either one of the following areas and that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year:

i) The area composed of the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County; or

ii) The area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County; and

B) Any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler at such sources described in subsection (a)(1)(A) of this Section that emits NO_x in an amount equal to or

383 greater than 15 tons per year and equal to or greater than five tons
384 per ozone season.

385
386 2) For purposes of this Section, "potential to emit" means the quantity of
387 NO_x that potentially could be emitted by a stationary source before add-on
388 controls based on the design capacity or maximum production capacity of
389 the source and 8,760 hours per year or the quantity of NO_x that potentially
390 could be emitted by a stationary source as established in a federally
391 enforceable permit.

392
393 b) If a source ceases to fulfill the emissions criteria of subsection (a) of this Section,
394 the requirements of this Subpart and Subpart E, F, G, H, I, or M of this Part
395 continue to apply to any emission unit that was ever subject to the provisions of
396 any of those Subparts.

397
398 c) The provisions of this Subpart do not apply to afterburners, flares, and
399 incinerators.

400
401 d) Where a construction permit, for which the application was submitted to the
402 Agency prior to the adoption of this Subpart, is issued that relies on decreases in
403 emissions of NO_x from existing emission units for purposes of netting or emission
404 offsets, such NO_x decreases remain creditable notwithstanding any requirements
405 that may apply to the existing emission units pursuant to this Subpart and Subpart
406 E, F, G, H, I, or M of this Part.

407
408 e) The owner or operator of an emission unit that is subject to this Subpart and
409 Subpart E, F, G, H, I, or M of this Part must operate such unit in a manner
410 consistent with good air pollution control practice to minimize NO_x emissions.

411
412 (Source: Added at 33 Ill. Reg. _____, effective _____)

413
414 **Section 217.152 Compliance Date**

415
416 a) Compliance with the requirements of Subparts E, F, G, H, I and M by an owner or
417 operator of an emission unit that is subject to any of those Subparts is required
418 beginning January 1, 2012.

419
420 b) Notwithstanding subsection (a) of this Section, compliance with the requirements
421 of Subpart G of this Part by an owner or operator of an emission unit subject to
422 Subpart G of this Part shall be extended until December 31, 2014, if such units are
423 required to meet emissions limitations for NO_x, as measured using a continuous
424 emissions monitoring system, and included within a legally enforceable order on

425 or before December 31, 2009, whereby such emissions limitations are less than 30
 426 percent of the emissions limitations set forth under Section 217.204.

- 427
- 428 c) Notwithstanding subsection (a) of this Section, the owner or operator of emission
 429 units subject to Subpart E or F of this Part and located at a petroleum refinery
 430 must comply with the requirements of this Subpart and Subpart E or F of this Part,
 431 as applicable, for those emission units beginning January 1, 2012, except that the
 432 owner or operator of emission units listed in Appendix H must comply with the
 433 requirements of this Subpart, including the option of demonstrating compliance
 434 with the applicable Subpart through an emissions averaging plan under Section
 435 217.158 and Subpart E or F of this Part, as applicable, for the listed emission units
 436 beginning on the dates set forth in Appendix H. With Agency approval, the
 437 owner or operator of emission units listed in Appendix H may elect to comply
 438 with the requirements of this Subpart and Subpart E or F of this Part, as
 439 applicable, by reducing the emissions of emission units other than those listed in
 440 Appendix H, provided that the emissions limitations of such other emission units
 441 are equal to or more stringent than the applicable emissions limitations set forth in
 442 Subpart E or F of this Part, as applicable, by the dates set forth in Appendix H.

443

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

445

446 **Section 217.154 Performance Testing**

- 447
- 448 a) Performance testing of NO_x emissions for emission units constructed on or before
 449 July 1, 2011, and subject to Subpart E, F, G, H, or I of this Part must be conducted
 450 in accordance with Section 217.157. This subsection does not apply to owners
 451 and operators of emission units demonstrating compliance through a continuous
 452 emissions monitoring system.
- 453
- 454 b) Performance testing of NO_x emissions for emission units for which construction
 455 or modification occurs after July 1, 2011, and that are subject to Subpart E, F, G,
 456 H, or I of this Part must be conducted within 60 days after achieving maximum
 457 operating rate but no later than 180 days after initial startup of the new or
 458 modified emission unit, in accordance with Section 217.157. This subsection
 459 does not apply to owners and operators of emission units demonstrating
 460 compliance through a continuous emissions monitoring system.
- 461
- 462 c) Notification of the initial startup of an emission unit subject to subsection (b) of
 463 this Section must be provided to the Agency no later than 30 days after initial
 464 startup.
- 465

- 466 d) The owner or operator of an emission unit subject to subsection (a) or (b) of this
467 Section must notify the Agency of the scheduled date for the performance testing
468 in writing at least 30 days before such date and five days before such date.
469
- 470 e) If demonstrating compliance through an emissions averaging plan, at least 30
471 days before changing the method of compliance, the owner or operator of an
472 emission unit must submit a written notification to the Agency describing the new
473 method of compliance, the reason for the change in the method of compliance,
474 and the scheduled date for performance testing, if required. Upon changing the
475 method of compliance, the owner or operator of an emission unit must submit to
476 the Agency a revised compliance certification that meets the requirements of
477 Section 217.155.
478

479 (Source: Added at 33 Ill. Reg. ____, effective _____)
480

481 **Section 217.155 Initial Compliance Certification**
482

- 483 a) By the applicable compliance date set forth under Section 217.152, an owner or
484 operator of an emission unit subject to Subpart E, F, G, H, or I of this Part who is
485 not demonstrating compliance through the use of a continuous emissions
486 monitoring system must certify to the Agency that the emission unit will be in
487 compliance with the applicable emissions limitation of Subpart E, F, G, H, or I of
488 this Part beginning on such applicable compliance date. The performance testing
489 certification must include the results of the performance testing performed in
490 accordance with Section 217.154(a) and (b) and the calculations necessary to
491 demonstrate that the subject emission unit will be in initial compliance.
492
- 493 b) By the applicable compliance date set forth under Section 217.152, an owner or
494 operator of an emission unit subject to Subpart E, F, G, H, I, or M of this Part who
495 is demonstrating compliance through the use of a continuous emissions
496 monitoring system must certify to the Agency that the affected emission units will
497 be in compliance with the applicable emissions limitation of Subpart E, F, G, H, I,
498 or M of this Part beginning on such applicable compliance date. The compliance
499 certification must include a certification of the installation and operation of a
500 continuous emissions monitoring system required under Section 217.157 and the
501 monitoring data necessary to demonstrate that the subject emission unit will be in
502 initial compliance.
503

504 (Source: Added at 33 Ill. Reg. ____, effective _____)
505

506 **Section 217.156 Recordkeeping and Reporting**
507

- 508 a) The owner or operator of an emission unit subject to Subpart E, F, G, H, I, or M
 509 of this Part must keep and maintain all records used to demonstrate initial
 510 compliance and ongoing compliance with the requirements of those Subparts.
 511
- 512 1) Except as otherwise provided under this Subpart or Subpart E, F, G, H, I,
 513 or M of this Part, copies of such records must be submitted by the owner
 514 or operator of the source to the Agency within 30 days after receipt of a
 515 written request by the Agency.
 516
- 517 2) Such records must be kept at the source and maintained for at least five
 518 years and must be available for immediate inspection and copying by the
 519 Agency.
 520
- 521 b) The owner or operator of an emission unit subject to Subpart E, F, G, H, I, or M
 522 of this Part must maintain records that demonstrate compliance with the
 523 requirements of those Subparts, as applicable, that include the following:
 524
- 525 1) Identification, type (e.g., gas-fired), and location of each unit.
 526
- 527 2) Calendar date of the record.
 528
- 529 3) Monthly, seasonal, and annual operating hours.
 530
- 531 4) Type and quantity of each fuel used monthly, seasonally, and annually.
 532
- 533 5) Product and material throughput, as applicable.
 534
- 535 6) Reports for all applicable emissions tests for NO_x conducted on the unit,
 536 including results.
 537
- 538 7) The date, time, and duration of any startup, shutdown, or malfunction in
 539 the operation of any emission unit subject to Subpart E, F, G, H, I, or M of
 540 this Part or any emissions monitoring equipment. The records must
 541 include a description of the malfunction and corrective maintenance
 542 activity.
 543
- 544 8) A log of all maintenance and inspections related to the unit's air pollution
 545 control equipment for NO_x that is performed on the unit.
 546
- 547 9) A log for the NO_x monitoring device, if present, including periods when
 548 not in service and maintenance and inspection activities that are performed
 549 on the device.
 550

- 551 10) Identification of time periods for which operating conditions and pollutant
552 data were not obtained by the continuous emissions monitoring system,
553 including the reasons for not obtaining sufficient data and a description of
554 corrective actions taken.
555
- 556 11) If complying with the emissions averaging plan provisions of Section
557 217.158, copies of the calculations used to demonstrate compliance with
558 the ozone season and annual control period limitations, noncompliance
559 reports for the ozone season, and ozone and annual control period
560 compliance reports submitted to the Agency.
561
- 562 c) The owner or operator of an industrial boiler subject to Subpart E of this Part
563 must maintain records in order to demonstrate compliance with the combustion
564 tuning requirements under Section 217.166.
565
- 566 d) The owner or operator of a process heater subject to Subpart F of this Part must
567 maintain records in order to demonstrate compliance with the combustion tuning
568 requirements under Section 217.186.
569
- 570 e) The owner or operator of an emission unit subject to Subpart E, F, G, H, I, or M
571 of this Part must maintain records in order to demonstrate compliance with the
572 testing and monitoring requirements under Section 217.157.
573
- 574 f) The owner or operator of an emission unit subject to Subpart E, F, G, H, or I of
575 this Part must provide the following information with respect to performance
576 testing pursuant to Section 217.157:
577
- 578 1) Submit a testing protocol to the Agency at least 60 days prior to testing;
579
- 580 2) Notify the Agency at least 30 days in writing prior to conducting
581 performance testing for NO_x emissions and five days prior to such testing;
582
- 583 3) Not later than 60 days after the completion of the test, submit the results of
584 the test to the Agency; and
585
- 586 4) If, after the 30-days' notice for an initially scheduled test is sent, there is a
587 delay (e.g., due to operational problems) in conducting the test as
588 scheduled, the owner or operator of the unit must notify the Agency as
589 soon as practicable of the delay in the original test date, either by
590 providing at least seven days' prior notice of the rescheduled date of the
591 test or by arranging a new test date with the Agency by mutual agreement.
592

- 593 g) The owner or operator of an emission unit subject to Subpart E, F, G, H, I, or M
594 of this Part must notify the Agency of any exceedances of an applicable emissions
595 limitation of Subpart E, F, G, H, I, or M of this Part by sending the applicable
596 report with an explanation of the causes of such exceedances to the Agency
597 within 30 days following the end of the applicable compliance period in which the
598 emissions limitation was not met.
599
- 600 h) Within 30 days after the receipt of a written request by the Agency, the owner or
601 operator of an emission unit that is exempt from the requirements of Subpart E, F,
602 G, H, I, or M of this Part must submit records that document that the emission
603 unit is exempt from those requirements to the Agency.
604
- 605 i) If demonstrating compliance through an emissions averaging plan, by March 1
606 following the applicable calendar year, the owner or operator must submit to the
607 Agency a report that demonstrates the following:
608
- 609 1) For all units that are part of the emissions averaging plan, the total mass of
610 allowable NO_x emissions for the ozone season and for the annual control
611 period;
612
- 613 2) The total mass of actual NO_x emissions for the ozone season and annual
614 control period for each unit included in the averaging plan;
615
- 616 3) The calculations that demonstrate that the total mass of actual NO_x
617 emissions are less than the total mass of allowable NO_x emissions using
618 equations in Section 217.158(f); and
619
- 620 4) The information required to determine the total mass of actual NO_x
621 emissions.
622
- 623 j) The owner or operator of an emission unit subject to the requirements of Section
624 217.157 and demonstrating compliance through the use of a continuous emissions
625 monitoring system must submit to the Agency a report within 30 days after the
626 end of each calendar quarter. This report must include the following:
627
- 628 1) Information identifying and explaining the times and dates when
629 continuous emissions monitoring for NO_x was not in operation, other than
630 for purposes of calibrating or performing quality assurance or quality
631 control activities for the monitoring equipment; and
632
- 633 2) An excess emissions and monitoring systems performance report in
634 accordance with the requirements of 40 CFR 60.7(c) and (d) and 60.13, or

635 40 CFR 75, or an alternate procedure approved by the Agency and
636 USEPA.

637
638 k) The owner or operator of an emission unit subject to Subpart M of this Part must
639 comply with the compliance certification and recordkeeping and reporting
640 requirements in accordance with 40 CFR 96, or an alternate procedure approved
641 by the Agency and USEPA.

642
643 (Source: Added at 33 Ill. Reg. ____, effective _____)

644
645 **Section 217.157 Testing and Monitoring**

646
647 a) Industrial Boilers and Process Heaters

648
649 1) The owner or operator of an industrial boiler subject to Subpart E of this
650 Part with a rated heat input capacity greater than 250 mmBtu/hr must
651 install, calibrate, maintain, and operate a continuous emissions monitoring
652 system on the emission unit for the measurement of NO_x emissions
653 discharged into the atmosphere in accordance with 40 CFR 75, as
654 incorporated by reference in Section 217.104.

655
656 2) The owner or operator of an industrial boiler subject to Subpart E of this
657 Part with a rated heat input capacity greater than 100 mmBtu/hr but less
658 than or equal to 250 mmBtu/hr must install, calibrate, maintain, and
659 operate a continuous emissions monitoring system on such emission unit
660 for the measurement of NO_x emissions discharged into the atmosphere in
661 accordance with 40 CFR 60, subpart A and appendix B, Performance
662 Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as
663 incorporated by reference in Section 217.104.

664
665 3) The owner or operator of a process heater subject to Subpart F of this Part
666 with a rated heat input capacity greater than 100 mmBtu/hr must install,
667 calibrate, maintain, and operate a continuous emissions monitoring system
668 on the emission unit for the measurement of NO_x emissions discharged
669 into the atmosphere in accordance with 40 CFR 60, subpart A and
670 appendix B, Performance Specifications 2 and 3, and appendix F, Quality
671 Assurance Procedures, as incorporated by reference in Section 217.104.

672
673 4) If demonstrating compliance through an emissions averaging plan, the
674 owner or operator of an industrial boiler subject to Subpart E of this Part,
675 or a process heater subject to Subpart F of this Part, with a rated heat input
676 capacity less than or equal to 100 mmBtu/hr and not demonstrating
677 compliance through a continuous emissions monitoring system must have

678 an initial performance test conducted pursuant to subsection (a)(4)(B) of
 679 this Section and Section 217.154.

680
 681 A) An owner or operator of an industrial boiler or process heater must
 682 have subsequent performance tests conducted pursuant to
 683 subsection (a)(4)(B) of this Section at least once every five years.
 684 When, in the opinion of the Agency or USEPA, it is necessary to
 685 conduct testing to demonstrate compliance with Section 217.164 or
 686 217.184, as applicable, the owner or operator of an industrial boiler
 687 or process heater must, at his or her own expense, have such test
 688 conducted in accordance with the applicable test methods and
 689 procedures specified in this Section within 90 days after receipt of
 690 a notice to test from the Agency or USEPA.

691
 692 B) The owner or operator of an industrial boiler or process heater
 693 must have a performance test conducted using 40 CFR 60, subpart
 694 A and appendix A, Method 1, 2, 3, 4, 7E, or 19, as incorporated by
 695 reference in Section 217.104, or other alternative USEPA methods
 696 approved by the Agency. Each performance test must consist of
 697 three separate runs, each lasting a minimum of 60 minutes. NO_x
 698 emissions must be measured while the industrial boiler is operating
 699 at maximum operating capacity or while the process heater is
 700 operating at normal maximum load. If the industrial boiler or
 701 process heater has combusted more than one type of fuel in the
 702 prior year, a separate performance test is required for each fuel. If
 703 a combination of fuels is typically used, a performance test may be
 704 conducted, with Agency approval, on such combination of fuels
 705 typically used. Except as provided under subsection (e) of this
 706 Section, this subsection (a)(4)(B) does not apply if such owner or
 707 operator is demonstrating compliance with an emissions limitation
 708 through a continuous emissions monitoring system under
 709 subsection (a)(1), (a)(2), (a)(3), or (a)(5) of this Section.

710
 711 5) Instead of complying with the requirements of subsections (a)(4),
 712 (a)(4)(A), and (a)(4)(B) of this Section, an owner or operator of an
 713 industrial boiler subject to Subpart E of this Part, or a process heater
 714 subject to Subpart F of this Part, with a rated heat input capacity less than
 715 or equal to 100 mmBtu/hr may install and operate a continuous emissions
 716 monitoring system on such emission unit in accordance with the
 717 applicable requirements of 40 CFR 60, subpart A and appendix B,
 718 Performance Specifications 2 and 3, and appendix F, Quality Assurance
 719 Procedures, as incorporated by reference in Section 217.104. The
 720 continuous emissions monitoring system must be used to demonstrate

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

723
 724 6) Notwithstanding subsection (a)(2) of this Section, the owner or operator of
 725 an auxiliary boiler subject to Subpart E of this Part with a rated heat input
 726 capacity less than or equal to 250 mmBtu/hr and a capacity factor of less
 727 than or equal to 20% is not required to install, calibrate, maintain, and
 728 operate a continuous emissions monitoring system on such boiler for the
 729 measurement of NO_x emissions discharged into the atmosphere, but must
 730 comply with the performance test requirements under subsections (a)(4),
 731 (a)(4)(A), and (a)(4)(B) of this Section.

732
 733 b) Glass Melting Furnaces; Cement Kilns; Lime Kilns; Iron and Steel Reheat,
 734 Annealing, and Galvanizing Furnaces; and Aluminum Reverberatory and
 735 Crucible Furnaces

736
 737 1) An owner or operator of a glass melting furnace subject to Subpart G of
 738 this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron
 739 and steel reheat, annealing, or galvanizing furnace subject to Subpart I of
 740 this Part, or aluminum reverberatory or crucible furnace subject to Subpart
 741 I of this Part that has the potential to emit NO_x in an amount equal to or
 742 greater than one ton per day must install, calibrate, maintain, and operate a
 743 continuous emissions monitoring system on such emission unit for the
 744 measurement of NO_x emissions discharged into the atmosphere in
 745 accordance with 40 CFR 60, subpart A and appendix B, Performance
 746 Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as
 747 incorporated by reference in Section 217.104.

748
 749 2) An owner or operator of a glass melting furnace subject to Subpart G of
 750 this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron
 751 and steel reheat, annealing, or galvanizing furnace subject to Subpart I of
 752 this Part, or aluminum reverberatory or crucible furnace subject to Subpart
 753 I of this Part that has the potential to emit NO_x in an amount less than one
 754 ton per day must have an initial performance test conducted pursuant to
 755 subsection (b)(4) of this Section and Section 217.154.

756
 757 3) An owner or operator of a glass melting furnace subject to Subpart G of
 758 this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron
 759 and steel reheat, annealing, or galvanizing furnace subject to Subpart I of
 760 this Part, or aluminum reverberatory or crucible furnace subject to Subpart
 761 I of this Part that has the potential to emit NO_x in an amount less than one
 762 ton per day must have subsequent performance tests conducted pursuant to
 763 subsection (b)(4) of this Section as follows:

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- 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.

- 807 5) Instead of complying with the requirements of subsections (b)(2), (b)(3),
 808 and (b)(4) of this Section, an owner or operator of a glass melting furnace
 809 subject to Subpart G of this Part, cement kiln or lime kiln subject to
 810 Subpart H of this Part, iron and steel reheat, annealing, or galvanizing
 811 furnace subject to Subpart I of this Part, or aluminum reverberatory or
 812 crucible furnace subject to Subpart I of this Part that has the potential to
 813 emit NO_x in an amount less than one ton per day may install and operate a
 814 continuous emissions monitoring system on such emission unit in
 815 accordance with the applicable requirements of 40 CFR 60, subpart A and
 816 appendix B, Performance Specifications 2 and 3, and appendix F, Quality
 817 Assurance Procedures, as incorporated by reference in Section 217.104 of
 818 this Part. The continuous emissions monitoring system must be used to
 819 demonstrate compliance with the applicable emissions limitation or
 820 emissions averaging plan on an ozone season and annual basis.
 821
- 822 c) Fossil Fuel-Fired Stationary Boilers. The owner or operator of a fossil fuel-fired
 823 stationary boiler subject to Subpart M of this Part must install, calibrate, maintain,
 824 and operate a continuous emissions monitoring system on such emission unit for
 825 the measurement of NO_x emissions discharged into the atmosphere in accordance
 826 with 40 CFR 96, subpart H.
 827
- 828 d) Common Stacks. If two or more emission units subject to Subpart E, F, G, H, I,
 829 M, or Q of this Part are served by a common stack and the owner or operator of
 830 such emission units is operating a continuous emissions monitoring system, the
 831 owner or operator may, with written approval from the Agency, utilize a single
 832 continuous emissions monitoring system for the combination of emission units
 833 subject to Subpart E, F, G, H, I, M, or Q of this Part that share the common stack,
 834 provided such emission units are subject to an emissions averaging plan under this
 835 Part.
 836
- 837 e) Compliance with the continuous emissions monitoring system (CEMS)
 838 requirements by an owner or operator of an emission unit who is required to
 839 install, calibrate, maintain, and operate a CEMS on the emission unit under
 840 subsection (a)(1), (a)(2), (a)(3), or (b)(1) of this Section, or who has elected to
 841 comply with the CEMS requirements under subsection (a)(5) or (b)(5) of this
 842 Section, or who has elected to comply with the predictive emission monitoring
 843 system (PEMS) requirements under subsection (f) of this Section, is required by
 844 the following dates:
 845
- 846 1) For the owner or operator of an emission unit that is subject to a
 847 compliance date in calendar year 2012 under Section 217.152, compliance
 848 with the CEMS or PEMS requirements, as applicable, under this Section
 849 for such emission unit is required by December 31, 2012, provided that,

850 during the time between the compliance date and December 31, 2012, the
 851 owner or operator must comply with the applicable performance test
 852 requirements under this Section and the applicable recordkeeping and
 853 reporting requirements under this Subpart. For the owner or operator of
 854 an emission unit that is in compliance with the CEMS or PEMS
 855 requirements, as applicable, under this Section on January 1, 2012, such
 856 owner or operator is not required to comply with the performance test
 857 requirements under this Section.

858
 859 2) For the owner or operator of an emission unit that is subject to a
 860 compliance date in a calendar year other than calendar year 2012 under
 861 Section 217.152 of this Subpart, compliance with the CEMS or PEMS
 862 requirements, as applicable, under this Section for such emission unit is
 863 required by the applicable compliance date, and such owner or operator is
 864 not required to comply with the performance test requirements under this
 865 Section.

866
 867 f) As an alternative to complying with the requirements of this Section, other than
 868 the requirements under subsections (a)(1) and (c) of this Section, the owner or
 869 operator of an emission unit who is not otherwise required by any other statute,
 870 regulation, or enforceable order to install, calibrate, maintain, and operate a
 871 CEMS on the emission unit may comply with the specifications and test
 872 procedures for a predictive emission monitoring system (PEMS) on the emission
 873 unit for the measurement of NO_x emissions discharged into the atmosphere in
 874 accordance with the requirements of 40 CFR 60, subpart A and appendix B,
 875 Performance Specification 16. The PEMS must be used to demonstrate
 876 compliance with the applicable emissions limitation or emissions averaging plan
 877 on an ozone season and annual basis.

878
 879 (Source: Added at 33 Ill. Reg. _____, effective _____)

880
 881 **Section 217.158 Emissions Averaging Plans**

882
 883 a) Notwithstanding any other emissions averaging plan provisions under this Part, an
 884 owner or operator of a source with certain emission units subject to Subpart E, F,
 885 G, H, I, or M of this Part, or subject to Subpart Q of this Part that are located in
 886 either one of the areas set forth under Section 217.150(a)(1)(A) or (B), may
 887 demonstrate compliance with the applicable Subpart through an emissions
 888 averaging plan. An emissions averaging plan can only address emission units that
 889 are located at one source and each unit may only be covered by one emissions
 890 averaging plan. Such emission units at the source are affected units and are
 891 subject to the requirements of this Section.

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- 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 NO_x emissions on an annual basis than the actual NO_x emissions of the unit or units that are replaced. Within 90 days after permanently shutting down a unit that is replaced, the owner or operator of such unit must submit a written request to withdraw or amend the applicable permit to reflect that the unit is no longer in service before the replacement unit may be included in an emissions averaging plan.
- 2) The following types of units may not be included in an emissions averaging plan:
 - A) Units that commence operation after January 1, 2002, except as provided by subsection (a)(1)(C) of this Section.
 - B) Units that the owner or operator is claiming are exempt pursuant to Section 217.162, 217.182, 217.202, 217.222, 217.242, or 217.342 of this Part, as applicable.
 - C) Units that are required to meet emission limits or control requirements for NO_x as provided for in an enforceable order, unless such order allows for emissions averaging.
- b) An owner or operator must submit an emissions averaging plan to the Agency by January 1, 2012. The plan must include, but is not limited to, the following:

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- 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 NO_x emissions from the units listed in the emissions averaging plan must be equal to or less than the total mass of allowable NO_x

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

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

982 Where:

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

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

$\underline{N_{act}}$ \equiv 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).

$\underline{N_{all}}$ \equiv 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).

$\underline{EM_{act(i)}}$ \equiv Total mass of actual NO_x emissions in tons for a unit as determined in subsection (f)(1) of this Section.

\underline{i} \equiv Subscript denoting an individual unit.

\underline{j} \equiv Subscript denoting the fuel type used.

\underline{k} \equiv Number of different fuel types.

\underline{n} \equiv Number of different units in the averaging plan.

$\underline{EM_{all(i)}}$ \equiv 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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 987 For each unit in the averaging plan, and each fuel used by such unit, determine
 988 actual and allowable NO_x emissions using the following equations:

989
 990 1) Actual emissions must be determined as follows:

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 992 When emission limits are prescribed in lb/mmBtu,

$$\underline{EM_{act(i)}} \equiv \frac{E_{act(i)} \times H_i}{2000}$$

993
 994
 995 When emission limits are prescribed in lb/ton of processed product,

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

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2) Allowable emissions must be determined as follows:

When emission limits are prescribed in lb/mmBtu,

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

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1004

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

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

1005
1006
1007

Where:

$\underline{EM_{act(i)}}$ \equiv Total mass of actual NO_x emissions in tons for a unit.

$\underline{EM_{all(i)}}$ \equiv Total mass of allowable NO_x emissions in tons for a unit.

$\underline{E_{act}}$ \equiv Actual NO_x emission rate (lbs/mmBtu or lbs/ton of product) as determined by a performance test, a continuous emissions monitoring system, or an alternative method approved by the Agency.

$\underline{E_{all}}$ \equiv 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.

\underline{H} \equiv 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) or (B) that is complying through an emissions averaging plan under this Section must comply with the applicable provisions for determining actual and allowable emissions under Section 217.390, the testing and monitoring requirements under Section 217.394, and the recordkeeping and reporting requirements under Section 217.396.
- h) The owner or operator of an emission unit located at a petroleum refinery who is demonstrating compliance with an applicable Subpart through an emissions averaging plan under this Section may exclude from the calculation demonstrating compliance those time periods when an emission unit included in the emissions averaging plan is shut down for a maintenance turnaround, provided that such owner or operator notify the Agency in writing at least 30 days in advance of the shutdown of the emission unit for the maintenance turnaround and the shutdown of the emission unit does not exceed 45 days per ozone season or calendar year and NO_x pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance turnaround.
- i) The owner or operator of an emission unit that combusts a combination of coke oven gas and other gaseous fuels and that is located at a source that manufactures iron and steel who is demonstrating compliance with an applicable Subpart through an emissions averaging plan under this Section may exclude from the calculation demonstrating compliance those time periods when the coke oven gas desulfurization unit included in the emissions averaging plan is shut down for maintenance, provided that such owner or operator notify the Agency in writing at least 30 days in advance of the shutdown of the coke oven gas desulfurization unit for maintenance and such shutdown does not exceed 35 days per ozone season or calendar year and NO_x pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance period.

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

SUBPART E: INDUSTRIAL BOILERS

Section 217.160 Applicability

- a) The provisions of Subpart D of this Part and this Subpart apply to all industrial boilers located at sources subject to this Subpart pursuant to Section 217.150, except as provided in subsections (b) and (c) of this Section.

1050 b) The provisions of this Subpart do not apply to boilers serving a generator that has
 1051 a nameplate capacity greater than 25 MWe and produces electricity for sale, and
 1052 cogeneration units, as that term is defined in 35 Ill. Adm. Code 225.130, if such
 1053 boilers or cogeneration units are subject to the CAIR NO_x Trading Programs
 1054 under 35 Ill. Adm. Code 225.Subpart D or E.

1055
 1056 c) The provisions of this Subpart do not apply to fluidized catalytic cracking units,
 1057 their regenerator and associated CO boiler or boilers and CO furnace or furnaces
 1058 where present, if such units are located at a petroleum refinery and such units are
 1059 required to meet emission limits or control requirements for NO_x as provided for
 1060 in an enforceable order.

1061
 1062 (Source: Added at 33 Ill. Reg. ____, effective _____)

1063
 1064 **Section 217.162 Exemptions**

1065
 1066 Notwithstanding Section 217.160 of this Subpart, the provisions of this Subpart do not apply to
 1067 an industrial boiler operating under a federally enforceable limit of NO_x emissions from such
 1068 boiler to less than 15 tons per year and less than five tons per ozone season.

1069
 1070 (Source: Added at 33 Ill. Reg. ____, effective _____)

1071
 1072 **Section 217.164 Emissions Limitations**

1073
 1074 On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the
 1075 atmosphere from any industrial boiler to exceed the following limitations. Compliance must be
 1076 demonstrated with the applicable emissions limitation on an ozone season and annual basis.

<u>Fuel</u>	<u>Emission Unit Type and Rated Heat Input Capacity (mmBtu/hr)</u>	<u>NO_x Emissions Limitation (lb/mmBtu) or Requirement</u>
a) <u>Natural Gas or Other Gaseous Fuels</u>	1) <u>Industrial boiler greater than 100</u>	<u>0.08</u>
	2) <u>Industrial boiler less than or equal to 100</u>	<u>Combustion tuning</u>
b) <u>Distillate Fuel Oil</u>	1) <u>Industrial boiler greater than 100</u>	<u>0.10</u>
	2) <u>Industrial boiler less than or equal to 100</u>	<u>Combustion tuning</u>

- | | | |
|------------------------------|---|--------------------------|
| c) <u>Other Liquid Fuels</u> | 1) <u>Industrial boiler greater than 100</u> | <u>0.15</u> |
| | 2) <u>Industrial boiler less than or equal to 100</u> | <u>Combustion tuning</u> |
| d) <u>Solid Fuel</u> | 1) <u>Industrial boiler greater than 100, circulating fluidized bed combustor</u> | <u>0.12</u> |
| | 2) <u>Industrial boiler greater than 250</u> | <u>0.18</u> |
| | 3) <u>Industrial boiler greater than 100 but less than or equal to 250</u> | <u>0.25</u> |
| | 4) <u>Industrial boiler less than or equal to 100</u> | <u>Combustion tuning</u> |

1078
 1079 e) For an industrial boiler combusting a combination of natural gas, coke oven gas,
 1080 and blast furnace gas, the NO_x emissions limitation shall be calculated using the
 1081 following equation:
 1082

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

1084 Where:

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- | | | |
|-------------------------|----------|--|
| $\frac{NO_{x_{NG}}}{}$ | \equiv | <u>0.084 lb/mmBtu for natural gas</u> |
| $\frac{Btu_{NG}}{}$ | \equiv | <u>the heat input of natural gas in Btu over that period</u> |
| $\frac{NO_{x_{COG}}}{}$ | \equiv | <u>0.144 lb/mmBtu for coke oven gas</u> |
| $\frac{Btu_{COG}}{}$ | \equiv | <u>the heat input of coke oven gas in Btu over that period</u> |
| $\frac{NO_{x_{BFG}}}{}$ | \equiv | <u>0.0288 lb/mmBtu for blast furnace gas</u> |
| $\frac{Btu_{BFG}}{}$ | \equiv | <u>the heat input of blast furnace gas in Btu over that period</u> |

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

Section 217.165 Combination of Fuels

The owner or operator of an industrial boiler subject to this Subpart and operated with any combination of fuels must comply with a heat input weighted average emissions limitation to demonstrate compliance with Section 217.164.

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

Section 217.166 Methods and Procedures for Combustion Tuning

The owner or operator of an industrial boiler subject to the combustion tuning requirements of Section 217.164 must have combustion tuning performed on the boiler at least annually. The combustion tuning must be performed by an employee of the owner or operator or a contractor who has successfully completed a training course on the combustion tuning of boilers firing the fuel or fuels that are fired in the boiler. The owner or operator must maintain the following records that must be made available to the Agency upon request:

- a) The date the combustion tuning was performed;
- b) The name, title, and affiliation of the person who performed the combustion tuning;
- c) Documentation demonstrating the provider of the combustion tuning training course, the dates the training course was taken, and proof of successful completion of the training course;
- d) Tune-up procedure followed and checklist of items (such as burners, flame conditions, air supply, scaling on heating surface, etc.) inspected prior to the actual tune-up; and
- e) Operating parameters recorded at the start and at conclusion of combustion tuning.

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

SUBPART F: PROCESS HEATERS

Section 217.180 Applicability

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

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

Section 217.182 Exemptions

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

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

Section 217.184 Emissions Limitations

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

<u>Fuel</u>	<u>Emission Unit Type and Rated Heat Input Capacity (mmBtu/hr)</u>	<u>No_x Emissions Limitation (lb/mmBtu) or Requirement</u>
a) <u>Natural Gas or Other Gaseous Fuels</u>	1) <u>Process heater greater than 100</u>	<u>0.08</u>
	2) <u>Process heater less than or equal to 100</u>	<u>Combustion tuning</u>
b) <u>Residual Fuel Oil</u>	1) <u>Process heater greater than 100, natural draft</u>	<u>0.10</u>
	2) <u>Process heater greater than 100, mechanical draft</u>	<u>0.15</u>
	3) <u>Process heater less than or equal to 100</u>	<u>Combustion tuning</u>
c) <u>Other Liquid Fuels</u>	1) <u>Process heater greater than 100, natural draft</u>	<u>0.05</u>
	2) <u>Process heater greater than 100, mechanical draft</u>	<u>0.08</u>

3) Process heater less than or equal to 100 Combustion tuning

1147
1148 (Source: Added at 33 Ill. Reg. ____, effective _____)
1149

1150 **Section 217.185 Combination of Fuels**
1151

1152 The owner or operator of a process heater subject to this Subpart and operated with any
1153 combination of fuels must comply with a heat input weighted average emissions limitation to
1154 demonstrate compliance with Section 217.184.
1155

1156 (Source: Added at 33 Ill. Reg. ____, effective _____)
1157

1158 **Section 217.186 Methods and Procedures for Combustion Tuning**
1159

1160 The owner or operator of a process heater subject to the combustion tuning requirements of
1161 Section 217.184 must have combustion tuning performed on the heater at least annually. The
1162 combustion tuning must be performed by an employee of the owner or operator or a contractor
1163 who has successfully completed a training course on the combustion tuning of heaters firing the
1164 fuel or fuels that are fired in the heater. The owner or operator must maintain the following
1165 records that must be made available to the Agency upon request:
1166

- 1167 a) The date the combustion tuning was performed;
- 1168
- 1169 b) The name, title, and affiliation of the person who performed the combustion
1170 tuning;
- 1171
- 1172 c) Documentation demonstrating the provider of the combustion tuning training
1173 course, the dates the training course was taken, and proof of successful
1174 completion of the training course;
- 1175
- 1176 d) Tune-up procedure followed and checklist of items (such as burners, flame
1177 conditions, air supply, scaling on heating surface, etc.) inspected prior to the
1178 actual tune-up; and
- 1179
- 1180 e) Operating parameters recorded at the start and at conclusion of combustion
1181 tuning.
- 1182

1183 (Source: Added at 33 Ill. Reg. ____, effective _____)
1184

1185 **SUBPART G: GLASS MELTING FURNACES**
1186

1187 **Section 217.200 Applicability**

1188
 1189 The provisions of Subpart D of this Part and this Subpart apply to all glass melting furnaces
 1190 located at sources subject to this Subpart pursuant to Section 217.150.

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 1192 (Source: Added at 33 Ill. Reg. ____, effective _____)

1193
 1194 **Section 217.202 Exemptions**

1195
 1196 Notwithstanding Section 217.200, the provisions of this Subpart do not apply to a glass melting
 1197 furnace operating under a federally enforceable limit of NO_x emissions from such furnace to less
 1198 than 15 tons per year and less than five tons per ozone season.

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 1200 (Source: Added at 33 Ill. Reg. ____, effective _____)

1201
 1202 **Section 217.204 Emissions Limitations**

1203
 1204 a) On and after January 1, 2012, no person shall cause or allow emissions of NO_x
 1205 into the atmosphere from any glass melting furnace to exceed the following
 1206 limitations. Compliance must be demonstrated with the emissions limitation on
 1207 an ozone season and annual basis.

1208

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

1209
 1210 b) The emissions limitations under this Section do not apply during glass melting
 1211 furnace startup (not to exceed 70 days) or idling (operation at less than 35% of
 1212 furnace capacity). For the purposes of demonstrating seasonal and annual
 1213 compliance, the emissions limitation during such periods shall be calculated as
 1214 follows:

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 1216
$$\text{NO}_x \text{ emissions limitation (lb/day)} = (\text{ANL})/(\text{PPC})$$

1217
 1218 Where:

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$$\text{ANL} = \text{The applicable NO}_x \text{ emissions limitation under this Section}$$

$$\text{in pounds per ton of glass produced}$$

PPC = Permitted production capacity in tons of glass produced per day

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

SUBPART H: CEMENT AND LIME KILNS

Section 217.220 Applicability

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

b) The provisions of Subpart D of this Part and this Subpart apply to all lime kilns located at sources subject to this Subpart pursuant to Section 217.150.

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

Section 217.222 Exemptions

Notwithstanding Section 217.220, the provisions of this Subpart do not apply to a cement kiln or lime kiln operating under a federally enforceable limit of NO_x emissions from such kiln to less than 15 tons per year and less than five tons per ozone season.

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

Section 217.224 Emissions Limitations

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

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

b) On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any lime kiln to exceed the following limitations.

1254 Compliance must be demonstrated with the applicable emissions limitation on an
 1255 ozone season and annual basis.
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<u>Fuel</u>	<u>Emission Unit Type</u>	<u>No_x Emissions Limitation (lb/ton lime produced)</u>
1) <u>Gas</u>	<u>Rotary kiln</u>	<u>2.2</u>
2) <u>Coal</u>	<u>Rotary kiln</u>	<u>2.5</u>

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 1258 (Source: Added at 33 Ill. Reg. ____, effective _____)
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1260 SUBPART I: IRON AND STEEL AND ALUMINUM MANUFACTURING
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1262 **Section 217.240 Applicability**
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- 1264 a) The provisions of Subpart D of this Part and this Subpart apply to all reheat
 1265 furnaces, annealing furnaces, and galvanizing furnaces used in iron and steel
 1266 making located at sources subject to this Subpart pursuant to Section 217.150.
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- 1268 b) The provisions of Subpart D of this Part and this Subpart apply to all
 1269 reverberatory furnaces and crucible furnaces used in aluminum melting located at
 1270 sources subject to this Subpart pursuant to Section 217.150.
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1272 (Source: Added at 33 Ill. Reg. ____, effective _____)
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1274 **Section 217.242 Exemptions**
 1275

1276 Notwithstanding Section 217.240, the provisions of this Subpart do not apply to an iron and steel
 1277 reheat furnace, annealing furnace, or galvanizing furnace, or aluminum reverberatory furnace or
 1278 crucible furnace operating under a federally enforceable limit of NO_x emissions from such
 1279 furnace to less than 15 tons per year and less than five tons per ozone season.
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1281 (Source: Added at 33 Ill. Reg. ____, effective _____)
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1283 **Section 217.244 Emissions Limitations**
 1284

- 1285 a) On and after January 1, 2012, no person shall cause or allow emissions of NO_x
 1286 into the atmosphere from any reheat furnace, annealing furnace, or galvanizing
 1287 furnace used in iron and steel making to exceed the following limitations.
 1288 Compliance must be demonstrated with the applicable emissions limitation on an
 1289 ozone season and annual basis.
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	<u>Emission Unit Type</u>	<u>No_x Emissions Limitation (lb/mmBtu)</u>
1)	<u>Reheat furnace, regenerative</u>	<u>0.18</u>
2)	<u>Reheat furnace, recuperative, combusting natural gas</u>	<u>0.09</u>
3)	<u>Reheat furnace, recuperative, combusting a combination of natural gas and coke oven gas</u>	<u>0.142</u>
4)	<u>Reheat furnace, cold-air</u>	<u>0.03</u>
5)	<u>Annealing furnace, regenerative</u>	<u>0.38</u>
6)	<u>Annealing furnace, recuperative</u>	<u>0.16</u>
7)	<u>Annealing furnace, cold-air</u>	<u>0.07</u>
8)	<u>Galvanizing furnace, regenerative</u>	<u>0.46</u>
9)	<u>Galvanizing furnace, recuperative</u>	<u>0.16</u>
10)	<u>Galvanizing furnace, cold air</u>	<u>0.06</u>

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

	<u>Emission Unit Type</u>	<u>No_x Emissions Limitation (lb/mmBtu)</u>
1)	<u>Reverberatory furnace</u>	<u>5.1</u>
2)	<u>Crucible furnace</u>	<u>5.1</u>

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

SUBPART M: ELECTRICAL GENERATING UNITS

Section 217.340 Applicability

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

1310 (Source: Added at 33 Ill. Reg. ____, effective _____)
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1312 **Section 217.342 Exemptions**
 1313

1314 a) Notwithstanding Section 217.340, the provisions of this Subpart do not apply to a
 1315 fossil fuel-fired stationary boiler operating under a federally enforceable limit of
 1316 NO_x emissions from such boiler to less than 15 tons per year and less than five
 1317 tons per ozone season.

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 1319 b) Notwithstanding Section 217.340, the provisions of this Subpart do not apply to a
 1320 coal-fired stationary boiler that commenced operation before January 1, 2008, that
 1321 is complying with 35 Ill. Adm. Code 225.Subpart B through the multi-pollutant
 1322 standard under 35 Ill. Adm. Code 225.233 or the combined pollutant standards
 1323 under 35 Ill. Adm. Code 225.Subpart F.

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 1325 (Source: Added at 33 Ill. Reg. ____, effective _____)
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1327 **Section 217.344 Emissions Limitations**
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1329 On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the
 1330 atmosphere from any fossil fuel-fired stationary boiler to exceed the following limitations.
 1331 Compliance must be demonstrated with the applicable emissions limitation on an ozone season
 1332 and annual basis.
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<u>Fuel</u>	<u>Emission Unit Type</u>	<u>No_x Emissions Limitation (lb/mmBtu)</u>
a) <u>Solid</u>	<u>Boiler</u>	<u>0.12</u>
b) <u>Natural gas</u>	<u>Boiler</u>	<u>0.06</u>
c) <u>Liquid</u>	1) <u>Boiler that commenced operation before January 1, 2008</u>	<u>0.10</u>
	2) <u>Boiler that commenced operation on or after January 1, 2008</u>	<u>0.08</u>

1334 (Source: Added at 33 Ill. Reg. ____, effective _____)
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1337 **Section 217.345 Combination of Fuels**
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1339 The owner or operator of a fossil fuel-fired stationary boiler subject to this Subpart and operated
1340 with any combination of fuels must comply with a heat input weighted average emissions
1341 limitation to demonstrate compliance with Section 217.344.

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1343 (Source: Added at 33 Ill. Reg. ____, effective _____)

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

ExxonMobil Oil Corporation (Facility ID 197800AAA)

<u>Point</u>	<u>Emission Unit Description</u>	<u>Compliance Date</u>
<u>0019</u>	<u>Crude Vacuum Heater (13-B-2)</u>	<u>December 31, 2014</u>
<u>0038</u>	<u>Alky Iso-Stripper Reboiler (7-B-1)</u>	<u>December 31, 2014</u>
<u>0033</u>	<u>CHD Charge Heater (3-B-1)</u>	<u>December 31, 2014</u>
<u>0034</u>	<u>CHD Stripper Reboiler (3-B-2)</u>	<u>December 31, 2014</u>
<u>0021</u>	<u>Coker East Charge Heater (16-B-1A)</u>	<u>December 31, 2014</u>
<u>0021</u>	<u>Coker East Charge Heater (16-B-1B)</u>	<u>December 31, 2014</u>
<u>0018</u>	<u>Crude Atmospheric Heater (1-B-1A)</u>	<u>December 31, 2014</u>
<u>0018</u>	<u>Crude Atmospheric Heater (1-B-1B)</u>	<u>December 31, 2014</u>
<u>0017</u>	<u>BEU HM-1</u>	<u>December 31, 2012</u>
<u>0018</u>	<u>BEU HM-2</u>	<u>December 31, 2012</u>
<u>0004</u>	<u>CR-1 Feed Preheat, H-1</u>	<u>December 31, 2012</u>
<u>0005</u>	<u>CR-1 1st Interreactor Heater, H-2</u>	<u>December 31, 2012</u>
<u>0009</u>	<u>CR-1 3rd Interreactor Heater, H-7</u>	<u>December 31, 2012</u>
<u>0091</u>	<u>CR-3 Charge Heater</u>	<u>December 31, 2012</u>
<u>0092</u>	<u>CR-3 1st Reheat Heater, H-5</u>	<u>December 31, 2012</u>
<u>0082</u>	<u>Boiler 17</u>	<u>December 31, 2012</u>
<u>0080</u>	<u>Boiler 15</u>	<u>December 31, 2012</u>
<u>0073</u>	<u>Alky HM-2 Heater</u>	<u>December 31, 2012</u>
<u>0662</u>	<u>VF-4 Charge Heater, H-28</u>	<u>December 31, 2012</u>
<u>0664</u>	<u>DU-4 Charge Heater, H-24</u>	<u>December 31, 2014</u>
<u>0617</u>	<u>DCU Charge Heater, H-20</u>	<u>December 31, 2014</u>
<u>0014</u>	<u>HCU Fractionator Reboil, H-3</u>	<u>December 31, 2016</u>
<u>0024</u>	<u>DU-1 Primary Heater South, F-301</u>	<u>December 31, 2016</u>
<u>0025</u>	<u>DU-1 Secondary Heater North, F-302</u>	<u>December 31, 2016</u>
<u>0081</u>	<u>Boiler 16</u>	<u>December 31, 2016</u>
<u>0083</u>	<u>Boiler 18</u>	<u>December 31, 2016</u>
<u>0095</u>	<u>DHT Charge Heater</u>	<u>December 31, 2016</u>
<u>0028</u>	<u>DU-2 Lube Crude Heater, F-200</u>	<u>December 31, 2016</u>
<u>0029</u>	<u>DU-2 Mixed Crude Heater West, F-202</u>	<u>December 31, 2016</u>
<u>0030</u>	<u>DU-2 Mixed Crude Heater East, F-203</u>	<u>December 31, 2016</u>

<u>0084</u>	<u>CR-2 North Heater</u>	<u>December 31, 2016</u>
<u>0017</u>	<u>BEU HM-1</u>	<u>December 31, 2012</u>

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1351 ConocoPhillips Company Wood River Refinery (Facility ID 119090AAA)

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1353 (Source: Added at 33 Ill. Reg. ____, effective _____)