ILLINOIS POLLUTION CONTROL BOARD December 21, 2000

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)	R01-11
)	(Rulemaking - Air)
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Proposed Rule. Second Notice.

OPINION AND ORDER OF THE BOARD (by N.J. Melas):

Today the Board adopts for second notice a proposal to implement a program to reduce nitrogen oxides $(NO_x)^1$ emissions from large cement kilns in Illinois. The program applies to emissions that occur during the period of May 31, 2004, to September 30, 2004, and then from May 1 to September 30 of subsequent years.

Today's proposal follows substantially the proposal filed with the Board by the Illinois Environmental Protection Agency (Agency) on August 21, 2000. The Agency proposes to amend 35 Ill. Adm. Code 211 and 217 of the Illinois air regulations. The Agency also proposes to have the Board add a new Subpart T to Part 217 and to make various conforming amendments to Parts 211 and 217. The Board adopted the Agency proposal for first notice. See <u>Proposed New 35 Ill. Adm. Code 217.</u> Subpart T, Cement Kilns, and Amendments to 35 Ill. Adm. Code 211 and 217 (August 24, 2000), R01-11.

The Environmental Protection Act (Act) at Section 9.9 requires that the Board adopt regulations limiting NO_x emissions from cement kilns. 415 ILCS 5/9.9(b) (1998 State Bar Edition, 1999 Supp.). Today's proposal is also part of the State's overall strategy to improve air quality as required by the federal Clean Air Act (CAA) including the CAA Amendments of 1990 (42 U.S.C. §§ 7401 *et seq.* (1990)). In particular, this rulemaking will assist Illinois in attaining statewide compliance with the one-hour air quality standard for ozone.²

¹ Nitrogen oxides consist of compounds of nitrogen and oxygen. The ratio of oxygen to nitrogen in these compounds ranges from .5 to 2.5. The term NOx is conventionally used for this group of compounds.

² Ozone is produced in the lower levels of the atmosphere when NOx or volatile organic compounds react with oxygen in the presence of sunlight. Controlling NOx is accordingly a method for controlling ozone. Tr.1 at 12-13; Exh. 5.

REGULATORY FRAMEWORK

Federal Actions/Requirements

Requirement for Attainment of the Ozone National Ambient Air Quality Standard

The State of Illinois has the primary responsibility under the CAA for ensuring that all National Ambient Air Quality Standards (NAAQS) are met in the State. This includes the NAAQS for ozone, which is 125 parts per billion. Tr.1 at 13, 16; Exh. 1 at 2; St. of Reas. at $2.^{3}$ Currently there are two areas of the State which do not meet the one-hour ozone NAAQS. These areas are the Chicago and Metro-East ozone nonattainment areas (NAAs).⁴ In addition, Illinois is required to control emissions that "contribute significantly to nonattainment in, or interfere with maintenance (of NAAQS) by, any other State". 42 U.S.C. § 7410(a)(2)(D) (1990).

NO_x SIP Call

On October 27, 1998, the USEPA promulgated a document titled "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Regions for Purpose of Reducing Regional Transport of Ozone." 63 Fed. Reg. 57,356 (1998). This document, and the requirements it imposes on states, is commonly known as the NO_x SIP Call.

The NO_x SIP Call requires that Illinois, along with other states located east of the Mississippi, develop plans to limit NO_x emissions to a specified budget. 65 Fed. Reg. 11,222 (2000). If a state fails to adopt a plan acceptable to USEPA, USEPA will impose its own Federal Implementation Plan (FIP).

USEPA set the final statewide budget for Illinois at 270,560 tons per yearly ozone season. 65 Fed. Reg. 11,222 (2000); Exh. 1 at 5; St. of Reas. at 11-12. The budget is based on projected NO_x emissions in 2007, taking into account required NO_x reductions. Tr.1 at 28-29; St. of Reas. at 11-12.

Three proposals for regulations to implement the other portions of the NO_x SIP Call are currently before the Board. Docket R01-09 addresses NO_x reductions from electrical generating units (EGUs). See <u>Proposed New 35 III. Adm. Code 217. Subpart W, The NO_x </u>

³ The transcripts of the hearing will be cited as "Tr.1 at ____" and "Tr.2 at ____" for the Chicago and Springfield hearings, respectively. Exhibits admitted at hearing will be cited as "Exh.____at ____." The Agency's Statement of Reasons will be cited as "St. of Reas. at ___." The Agency's Comments will be cited as "PC at ___."

⁴ The Agency often refers to the terms "Metro-East NAA" and "Chicago NAA" as (respectively) the "St. Louis/Metro East NAA" and the "Lake Michigan NAA." During the hearings for docket R01-09, the Agency said that there is no intended regulatory consequence in this use of alternate terminology. See R01-09 record, Tr.1 at 235-6.

<u>Trading Program for Electrical Generating Units, and Amendments to 35 III. Adm. Code 211</u> <u>And 217</u> (November 16, 2000), R01-09. Docket R01-16 also addresses NO_x reductions from EGUs, but specifically addresses NO_x control strategies necessary to demonstrate attainment of the 1-hour NAAQS for ozone by May 1, 2003, in the Metro East NAA. See <u>Proposed</u> <u>Amendments to 35 III. Adm. Code 217. Subpart V, Electric Power Generation</u> (October 19, 2000), R01-16. Docket R01-17 addresses control of NO_x from fossil fuel-fired stationary boilers, combustion turbines, and combined cycle systems that are not in EGUs. It also addresses voluntary NO_x reductions with respect to the Subpart U and Subpart W trading programs. See <u>Proposed New 35 III. Adm. Code 217. Subpart U, NO_x Control and Trading Program for Specified NO_x Generating Units, Subpart X, Voluntary NO_x Emissions Reduction Program, and Amendments to 35 III. Adm. Code 211 (October 19, 2000), R01-17.</u>

Illinois is not required under the NO_x SIP Call to control any particular source at any particular level, as long as the State meets its final statewide budget. However, the Agency contends that controls on large cement kilns are necessary to meet the statewide budget. Tr.1 at 21; Exh. 1 at 5; Exh. 5; St. of Reas. at 7, 13.

Action in Federal Court

The NO_x SIP Call was challenged before the U.S. Court of Appeals for the D.C. Circuit. That court subsequently stayed the effective date of the NO_x SIP Call rule on May 25, 1999, but lifted the stay 13 months later on June 22, 2000. <u>Michigan v. EPA</u>, No. 98-1497, (D.C. Cir. 2000); Tr.1 at 20; Exh. 1 at 4. On March 3, 2000, the court upheld most of the NO_x SIP Call rule. <u>Michigan v. EPA</u>, 213 F.3d 663 (D.C. Cir. 2000).⁵ On September 20, 2000, and October 20, 2000, a total of three *writs of certiorari* were filed in the U.S. Supreme Court. See <u>Michigan v. EPA</u>, U.S., Nos. 00-445, 00-632, 00-633. As of this date, the Supreme Court has not indicated whether it intends to hear the appeals. Other NO_x -related court actions pending include <u>American Trucking Association v. EPA</u>, 175 F.3d 1027 (D.C. Cir. 1999) involving the 8-hour ozone air quality standard, and <u>Appalachian Power Company v. EPA</u>, No. 99-1268 (D.C. Cir. 2000) involving NO_x budget allocations.

The Board cannot, of course, base its decision in this matter on a prospective outcome of a court action. It is necessary for the Board to make its decision based on the current status of the law. In that regard, the Board believes the law requires that we move forward with the proposal presented to us by the Agency. The Board will revisit this decision if a change in the law requires.

Implementation Date. At first notice the date for full implementation of the NO_x SIP Call (including the regulations for large cement kilns) was May 1, 2003. This date was part of

⁵ The court reversed and remanded for further consideration the inclusion of portions of Missouri and Georgia in the rule, and reversed the inclusion of Wisconsin in the rule because USEPA had not made a showing that sources in Wisconsin significantly contributed to nonattainment or interfered with maintenance of the NAAQS in any other State. Neither of these changes affects today's proposed action.

the original NO_x SIP Call and is included in Section 9.9 of the Act. 415 ILCS 5/9.9(f) (1998 State Bar Edition, 1999 Supp.). However, on August 30, 2000, the D.C. Circuit Court of Appeals issued an order extending the deadline for full implementation of the NO_x SIP Call to May 31, 2004. See Michigan v. EPA, No. 98-1497 (D.C. Cir. 2000).

At hearing the Agency filed a motion to amend its proposal to incorporate the later, May 31, 2004, implementation date ordered by the D.C. Circuit Court of Appeals. See Exh. 4. The Board grants that motion, and includes in today's proposal all the changes requested in the Agency's motion.⁶ The Board notes that language in Section 9.9 of the Act provides for further delay in the implementation of the NO_x SIP Call if the other USEPA Region V states and Kentucky do not have an approved SIP or FIP by May 31, 2004. 415 ILCS 5/9.9(f); see also Exh. 1 at 6; St. of Reas. at 26.

State Actions/Requirements

Section 9.9 also requires that "the Agency shall propose and the Board shall adopt regulations to implement NO_x emission reduction programs for cement kilns." 415 ILCS 5/9.9(b) (1998 State Bar Edition, 1999 Supp.). Section 9.9 also provides that cement kilns may opt into the NO_x trading program. 415 ILCS 5/9.9(b), 39.5(1) (1998 State Bar Edition, 1999 Supp.)

PROPOSAL DEVELOPMENT

Starting in early 1999, the Agency held several meetings with representatives of the Illinois cement kiln industry and the Illinois Environmental Regulatory Group (IERG). The Agency then developed the instant proposal, which the Agency believes is supported by the cement kiln industry. Exh. 1 at 7; Exh. 2 at 5-6; St. of Reas. at 19-20.

PROCEDURAL HISTORY

The Board held public hearings in this matter in Chicago, Illinois, on October 3, 2000, and in Springfield, Illinois, on November 3, 2000, before Board Hearing Officer Joel Sternstein and Board Member Nicholas Melas. Hearings were scheduled and conducted in accordance with Section 28.5 of the Act. 415 ILCS 5/28.5 (1998). Section 28.5 provides for "fast-track" adoption of certain regulations necessary for compliance with the CAAA.

Agency attorney Alec Messina presented three staff members as witnesses at hearing: Dennis Lawler, Manager of the Division of Air Pollution Control, and Yoginder Mahajan and Berkley Moore of the Air Quality Planning Unit. Brooke Peterson of IERG was the only member of the regulated community to attend the hearings.

⁶ Primarily those changes include shifting the relevant dates in the proposal to the following year, since the implementation date is now 2004, rather than 2003. See the proposed language at Sections 217.602(a), 217.604(a) (b), and (c), 217.606(a), and 217.608(a) and (b).

The record in this matter closed on November 23, 2000, as provided for at Section 28.5(1) of the Act. The Agency filed comments, but no other parties submitted comments.

THE PROPOSAL

Scope and Affected Facilities

The proposed regulations affect only large cement kilns that are capable of emitting at least one ton of NO_x per day from May 1 through September 30. Tr.1 at 21, 31; Exh. 3 at 6; St. of Reas. at 1, 13-14, 24.

Owners and operators of kilns that began operation after January 1, 1996, must meet either the requirements of the proposed regulations or other requirements under the CAA, depending on which set of requirements are more stringent. This provision was added to take into account CAA Prevention of Significant Deterioration and New Source Review requirements. Tr.1 at 33, 43-45; Exh. 3 at 8; St. of Reas. at 25; PC at 4. Currently, all of the large cement kilns in Illinois were constructed prior to 1996. Tr.1 at 40.

USEPA used the findings of the Ozone Transport Assessment Group (OTAG) in drafting the NO_x SIP Call. OTAG found that, in order to effectively control NO_x in NAAs, states would have to control NO_x emissions in both attainment areas (AAs) and NAAs. Transport of NO_x from AAs increases NO_x formation in NAAs. The Agency conducted similar studies for the Chicago NAA and reached the same conclusions as OTAG. Tr.1 at 14-18, 19; Exh. 5. Thus, the proposal applies to large cement kilns across Illinois, not just those in NAAs. Tr.1 at 25; Exh. 2 at 1; St. of Reas. at 11.

The Agency conducted a survey and determined that there are currently four cement kilns at three sources which will be affected by the proposed regulations. Tr.1 at 27; Exh. 2 at 5. One kiln is at the Illinois Cement Company facility in LaSalle, one is at the Lone Star Industries, Inc. facility in Oglesby, and two are at the LaFarge Corporation facility in Joppa. All of the regulated kilns in Illinois are currently long dry kilns, but the kiln at the Illinois Cement Company is being converted into a preheater/precalciner kiln. The proposed regulations also address long wet kilns and preheater kilns. Tr.1 at 46-47; Technical Support Document at 4-5, 22.

NO_x Reductions

 NO_x emissions from large cement kilns are not currently regulated in Illinois. The proposed regulations should result in a 30% decrease from uncontrolled levels of NO_x emissions for large cement kilns. Tr.1 at 21, 30, 38-39; Exh. 5; St. of Reas. at 1-2, 11; PC at 1-2, 4-5.

In order to determine the reductions needed to meet the requirements of the NOx SIP Call, the Agency used 1995 as a baseline year and measured the NOx emissions from large cement kilns in Illinois that emitted more than one ton of NOx per day. The Agency then used

USEPA's economic growth projection of 42% for the period 1995-2007 and estimated that the 2007 yearly seasonal budget would be 4,073 tons for large cement kilns in Illinois. The Agency reduced this budget by 30% (1,222 fewer tons of NO_x) and determined that the controlled level of NO_x should be 2,851 tons in 2007. Tr.1 at 29, 39-40, 49-50; Exh. 2 at 5; PC at 3-5.

Methods to Achieve NO_x Reductions

Cement manufacturing requires a large amount of fuel (usually coal or natural gas) to be burned at high temperatures – typically over $2,000^{\circ}$ F. One of the byproducts from this combustion is NO_x. (In addition, some nitrogen from the raw materials and the coal combines with atmospheric oxygen to produce NO_x). The combustion process produces a material called clinker that is then blended with other material to produce cement. Tr.1 at 25; Exh. 2 at 2.

There are two categories of NO_x controls for cement kilns: Combustion controls reduce NO_x formation, whereas postcombustion controls involve destroying NO_x that has already formed during the combustion process. Tr.1 at 25-26; Exh. 2 at 3, St. of Reas. at 16.

There are a variety of combustion and postcombustion control technologies. Low NO_x burners or mid-kiln firing systems are "conventional" combustion control methods. Low NO_x burners reduce flame turbulence, control the mixing of fuel and air, and establish fuel-rich zones for initial combustion. Mid-kiln firing involves injecting fuel for producing clinker into the middle of the kiln, thus ensuring better heat continuity. USEPA found that large cement kilns could generally achieve a 20% to 30% reduction in NO_x emissions by utilizing these conventional combustion controls. Tr.1 at 25, 29; Exh. 2 at 1-2, 6; St. of Reas. at 16-18; PC at 5-6.

The proposed rule offers owners or operators of kilns five compliance options:

- 1. Installing and operating low NO_x burners or mid-kiln firing systems.
- 2. Employing alternative control techniques that achieve NO_x emission reductions equivalent to option 1.
- 3. Developing an emissions reduction plan that will achieve a 30% reduction in NO_x emissions.
- 4. Obtaining an adjusted standard. Tr.1 at 33-34; Exh. 3 at 6-8; St. of Reas. at 14-15, 24-26; PC at 4-5.
- 5. Allowing large cement kilns to opt into the NOx trading program for EGUs and the NOx trading program for non-EGU fossil fuel-fired stationary boilers, combustion turbines, and combined cycle systems. See 40 C.F.R. § 96 (1998); Proposed New 35 Ill. Adm. Code 217. Subpart W, the NOx Trading Program for Electrical Generating Units, and Amendments to 35 Ill. Adm. Code 211 and 217 (November 16, 2000), R01-9; Proposed New 35 Ill. Adm. Code 217. Subpart U, NOx Control and Trading Program for Specified NOx Generating Units, Subpart X, Voluntary NOx Emissions Reduction Program, and

Amendments To 35 Ill. Adm. Code 211 (October 19, 2000), R01-17; Tr.1 at 21, 51-53; Tr.2 at 13; Exh. 1 at 6; Exh. 5; PC at 5.

Other Requirements

Owners and operators of large cement kilns must perform both initial and annual testing. Tr.1 at 34-35; Exh. 3 at 9-10; St. of Reas. at 26-27. They must also monitor kiln operations and submit a detailed monitoring plan to the Agency. Tr.1 at 35-36; Exh. 3 at10-11; St. of Reas at 27-28. The proposed regulations also set out detailed requirements on reporting to the Agency and record keeping procedures. For example, owners or operators must submit an initial compliance certification and annual emissions reports to the Agency. They must also produce and keep certain documents describing kiln operations, startups, shutdowns, malfunctions, maintenance, testing, and tons of clinker produced per day. Tr.1 at 36-37, 48-49; Exh. 3 at 11-13; St. of Reas. at 28-30.

ECONOMIC AND TECHNICAL CONSIDERATIONS

Section 27(a) of the Act requires that in promulgating regulations, the Board "shall take into account . . . the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution." 415 ILCS 5/27(a) (1998).

Implementation of NO_x emission controls involves both capital costs and annual costs. Cost effectiveness is calculated by dividing the annual cost by the tons of NO_x removed. Exh. 2 at 4; St. of Reas. at 19. USEPA determined that owners and operators of large cement kilns would be able to employ NO_x emission control technologies at a cost of less than \$2,000 per ton which would lead to a substantial reduction in NO_x emissions from uncontrolled levels. St. of Reas. at 12.

USEPA estimated that combustion controls cost between \$236 and \$1,424 per ton of NO_x removed, while non-combustion controls cost between \$846 and \$5,216 per ton. USPEA determined that the average cost effectiveness for NO_x SIP Call controls from cement kilns would be \$1,573 per ton of NO_x removed. (All figures are expressed in 1999 dollars.) USEPA found the control of NO_x in large cement kilns to be "highly cost effective." Tr.1 at 20-21, 26-27, 29; Exh. 1 at 4; Exh. 2 at 4-5; St. of Reas. at 7; PC at 4.

The Agency estimates that the proposed regulations will have an annualized cost of \$1.9 million for all of the large cement kilns in Illinois. Approximately 15% of that \$1.9 million will entail the added testing, monitoring, reporting and record keeping activities. Tr.2 at 8-12.

Thus, USEPA and the Agency have determined that the control techniques required for large cement kilns to comply with the NO_x budgets are both technically feasible and economically reasonable. St. of Reas. at 15-16, 19.

CHANGES DURING THE FIRST-NOTICE PERIOD

The modifications which arose during the first-notice period are as follows: The Board includes in this order new definitions in the table of contents at 35 III. Adm. Code 211 from docket R01-09 for the sake of consistency. The new implementation date for the NO_x SIP Call affects several of the dates in the regulatory proposal; those dates have been changed in the order. See Exh. 4. At first notice the Agency had not yet proposed the non-EGU NO_x trading program. See PC at 6. The changes in the order provide the option for owners and operators of large cement kilns to opt into the non-EGU trading program described in docket R01-17. The reference to the Board's adjusted standard procedure at Section 217.602(a)(5) has been changed to reflect the Board's new procedural rules that will go into effect on January 1, 2001. See Revision of the Board's Procedural Rules: 35 III. Adm. Code 101-130 (December 21, 2000), R00-20. The Board also includes several minor technical changes as well.

First-notice additions are marked with single underlines while first notice deletions are marked with single strikeouts. Additions since first notice are marked with double underlines. Deletions of first notice language are marked with single underlines and double strikeouts.

CONCLUSION

Pursuant to both federal and State law, large cement kilns in Illinois are required to significantly reduce emissions of NO_x from May 31 to September 30 during 2004 and from May 1 to September 30 starting in 2005. As a result, the Board adopts the Agency proposal, with modifications, for second notice.

ORDER

The Board hereby proposes for second notice the following amendments to 35 Ill. Adm. Code 211 and 217. The Clerk of the Board is directed to file these proposed rules with the Joint Committee on Administrative Rules.

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
- Adhesive Adhesive
- 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
- Allowance 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
- 211.670 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
211.750	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
<u>211.955</u>	Cement
211.960	Cement Kiln
211.970	Certified Investigation
211.980	Chemical Manufacturing Process Unit
211.990	Choke Loading
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
211.1316	Combustion Turbine
211.1320	Commence Commercial Operation
211.1324	Commence Operation
211.1328	Common Stack
211.1330	Complete Combustion
211.1350	Component
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- 211.1370 Concrete Curing Compounds
- 211.1390 Concentrated Nitric Acid Manufacturing Process
- 211.1410 Condensate
- 211.1430 Condensible PM-10
- 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
- 211.1750 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 (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
- 211.2360 Flexible Coating
- 211.2365 Flexible Operating 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
- 211.2630 Gloss Reducers
- 211.2650 Grain
- 211.2670 Grain-Drying Operation
- 211.2690 Grain-Handling and Conditioning Operation
- 211.2710 Grain-Handling Operation
- 211.2730 Green-Tire Spraying
- 211.2750 Green Tires
- 211.2770 Gross Heating Value
- 211.2790 Gross Vehicle Weight Rating
- 211.2810 Heated Airless Spray

211.2815	Heat Input
211.2820	Heat Input Rate
211.2830	Heatset
211.2850	Heatset Web Offset Lithographic Printing Line
211.2870	Heavy Liquid
211.2890	Heavy Metals
211.2910	Heavy Off-Highway Vehicle Products
211.2930	Heavy Off-Highway Vehicle Products Coating
211.2950	Heavy Off-Highway Vehicle Products Coating Line
211.2970	High Temperature Aluminum Coating
211.2990	High Volume Low Pressure (HVLP) Spray
211.3010	Hood
211.3030	Hot Well
211.3050	Housekeeping Practices
211.3070	Incinerator
211.3090	Indirect Heat Transfer
211.3110	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
211.3250	Light Liquid
211.3330	Light-Duty Truck
211.3350	Light Oil
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
211.3480	Loading Event
211.3483	Long Dry Kiln
211.3485	Long Wet Kiln
211.3487	Low- $NO_{x}NO_{x}$ Burner
211.3490	Low Solvent Coating
211.3500	Lubricating Oil
211.3510	Magnet Wire
211.3530	Magnet Wire Coating
211.3550	Magnet Wire Coating Line
211.3530	Major Dump Dit

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
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- Appendix A Rule into Section Table

Appendix B Section into Rule Table

AUTHORITY: Implementing Sections 9, 9.1, <u>9.9</u>, and 10 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/9, 9.1, 10, 27 and 28.5].

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.11405, effective June 22, 1998;

amended in R01-09 at 24 Ill. Reg., effective; amended in R01-11at 25 Ill. Reg., effective.

BOARD NOTE: This Part implements the Illinois Environmental Protection Act as of July 1, 1994.

SUBPART B: DEFINITIONS

Section 211.955 Cement

"Cement" means, for the purposes of 35 Ill. Adm. Code 217, Subpart T, a hydraulic cement produced by pulverizing clinker consisting primarily of hydraulic calcium silicates, usually containing one or more of the forms of calcium sulfate as an interground addition.

(Source: Added at <u>25</u> Ill. Reg. , effective)

Section 211.960 Cement Kiln

"Cement kiln" means, for the purposes of 35 Ill. Adm. Code 217, Subpart T, a system including any solid, gaseous or liquid fuel combustion equipment, used to preheat, calcine and react with raw materials, including limestone and clay, to produce cement clinker.

(Source: Added at <u>25</u> Ill. Reg., effective)

Section 211.1120 Clinker

"Clinker" means the product of a cement kiln from which finished cement is manufactured by milling and grinding.

(Source: Added at <u>25</u> Ill. Reg. , effective)

Section 211.3483 Long Dry Kiln

"Long dry kiln" means a kiln 14 feet or larger in outside diameter, 400 feet or larger in length, which employs no preheating of the feed in the cyclone chambers, and the inlet feed to the kiln is dry.

(Source: Added at 25 Ill. Reg. _____, effective _____)

Section 211.3485 Long Wet Kiln

"Long wet kiln" means a kiln 14 feet or larger in outside diameter, 400 feet or greater in length, which employs no preheating of the feed in the cyclone chambers, and the inlet feed to the kiln is a slurry. (Source: Added at <u>25</u> Ill. Reg. , effective)

Section 211.3487 Low-<u>NOx</u> Burner

"Low-<u>NO_xNO_x burner</u>" means for the purpose of 35 III. Adm. Code 217, Subpart T, a type of cement kiln burner system designed to lower <u>NO_xNO_x</u> formation by controlling flame turbulence, delaying fuel/air mixing and establishing fuel-rich zones for initial combusting, which for firing of solid fuel by a kiln's main burner includes an indirect firing system or comparable technique for the main burner to lower the amount of primary combustion air supplied with the pulverized fuel. In an indirect firing system, one air stream is used to convey pulverized fuel from the grinding equipment and another air stream is used to supply primary combustion air to the kiln burner with the pulverized fuel, with intermediate storage of the fuel. In contrast, in a direct firing system, the air stream used to convey pulverized coal is then directly used as primary combustion air without any intermediate storage of fuel, resulting in more primary combustion air than with an indirect system.

(Source: Added at 25 Ill. Reg. _____, effective _____)

Section 211.3780 Mid-Kiln Firing

"Mid-kiln firing" means, for the purposes of 35 Ill. Adm. Code 217, Subpart T, a secondary firing in a kiln system by injecting fuel at an intermediate point in the kiln system using a specially designed fuel injection mechanism for the purposes of decreasing $NO_x NO_x$ emissions through burning part of the fuel at a lower temperature, and reducing conditions at the fuel injection point that may destroy some of the $NO_x NO_x$ formed upstream in the kiln system.

(Source: Added at 25 Ill. Reg. _____, effective _____)

Section 211.5015 Preheater Kiln

"Preheater kiln" means, for the purposes of 35 Ill. Adm. Code 217, Subpart T, a kiln where the feed to the kiln is preheated in cyclone chambers prior to the final reactions in a kiln which forms clinker.

(Source: Added at 25 Ill. Reg. _____, effective _____)

Section 211.5020 Preheater/Precalciner Kiln

"Preheater/precalciner kiln" means, for the purposes of 35 Ill. Adm. Code 217, Subpart T, a kiln where the feed to the kiln is preheated in cyclone chambers and utilizes a second burner to calcine material in a separate vessel attached to the preheater prior to the final fusion in a kiln which forms clinker.

(Source: Added at 25 Ill. Reg. _____, effective _____)

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

SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 217 NITROGEN OXIDES EMISSIONS

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- 217.100 Scope and Organization
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SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

<u>Section</u> 217.121 New Emission Sources

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SUBPART V: ELECTRIC POWER GENERATION

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Section

- 217.750 Purpose
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- 217.764 NO_x Allocations for Budget EGUs
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- 217.782 Allowance Allocations to Budget Opt-In Units
- Appendix A Rule into Section Table
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- Appendix C Compliance Dates
- Appendix D Non-Electrical Generating Units
- Appendix F Allowances for Electrical Generating Units

AUTHORITY: Implementing Sections 9, 9.1, 9.9, and 10 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/10 and 27.] (Ill. Rev. Stat. 1981, ch. 111 ¹/₂, pars. 1010 and 1027)

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 III. Reg. 17, p. 101, effective April 13, 1978; codified at 7 III. Reg. 13609; amended in R01- 09 at 24 III. Reg. _____, effective ______; amended in R01-11 at 25 III. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

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 method, as published in 40 CFR 60, Appendix A, Method 7= (1999);
- b) 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); and
- d) 40 CFR 72, 75 & 76 (1999);
- <u>be</u>) Alternative Control Techniques Document---- <u>NOx</u>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;
- ef)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;
- $\frac{dg}{dt}$ 40 CFR § 60.13 (1999); and
- eh) 40 CFR 60, Appendix A, Methods 7, 7A, 7C, 7D, and 7E (1999).

(Source: Amended at <u>25</u> Ill. Reg. _____, effective _____)

SUBPART T: CEMENT KILNS

Section 217.600 Applicability

The requirements of this Subpart shall apply to the types of cement kilns listed below with process rates in tons per hour (TPH) of clinker produced that are greater than or equal to the following:

- a) Long dry kilns -- 12 TPH;
- b) Long wet kilns -- 10 TPH;

- c) Preheater kilns -- 16 TPH; and
- d) Preheater/precalciner kilns -- 22 TPH.

(Source: Added at ____III. Reg. _____, effective _____)

Section 217.602 Control Requirements

- a) After May 30, 2004 April 30, 2003, an owner or operator of any cement kiln subject to the requirements of this Subpart shall not operate the kiln during the control period or any subsequent control period, unless the owner or operator complies with either subsection (a)(1), (a)(2), (a)(3), (a)(5) or (a)(6) of this Section for kilns which commenced operation prior to January 1, 1996, or either subsection (a)(4) or (a)(6) of this Section for kilns which commenced operation on or after January 1, 1996.
 - $\frac{1)}{\text{System;}} \qquad \frac{\text{The kiln is operated with a low- NO_x}}{\text{System;}} \text{ burner or a mid-kiln firing}$
 - $\frac{2)}{2} \frac{\text{The kiln shall not exceed the applicable <math>NO_x NO_x}{\text{pounds per ton of clinker (lb/T), expressed in the rates listed below:}}$
 - A) Long dry kilns -- 5.1 lb <u>NOx</u> /T of clinker;
 - B) Long wet kilns -- 6.0 lb <u>NOx</u> /T of clinker;
 - <u>C)</u> Preheater kilns -- 3.8 lb <u>NOx</u> /T of clinker; or
 - D) Preheater/precalciner kilns -- 2.8 lb <u>NO_xNO_x</u> /T of clinker.
 - 3) The kiln achieves a 30 percent or greater reduction from its uncontrolled baseline, established as set forth in this subsection (a)(3), and complying with the following:
 - <u>A)</u> Uncontrolled baseline emissions shall be determined using the following equation:

$$\frac{\text{UBE}}{\div 2000 \text{ lbs NO}_x \text{NOx}} = \frac{[\text{EF x SPR}]}{/T}$$

Where:

 $\frac{\text{UBE}}{\text{UBE}} = \frac{\text{Uncontrolled Baseline } NO_x NO_x}{\text{expressed in tons of } NO_x NO_x} \text{ per control period};}$

- $\frac{\text{EF}}{\text{EF}} = \frac{\text{Emissions factor, expressed in lbs of NO}_{x} \text{NO}_{x} \text{ per}}{\frac{\text{ton of clinker produced per control period, based}}{\frac{\text{on one of the methods in subsection (a)(3)(B) of}}{\frac{\text{this Section; and}}}$
- SPR =Seasonal production rate, expressed in tons of
clinker produced per control period, using the
average of the two highest control period operating
rates from the previous three-year period at the
time the application for the permit with federally
enforceable conditions is submitted to the Agency
pursuant to subsection (a)(3)(C) of this Section.
- B) Emissions factors shall be determined using one of the following methods:
 - i) The average of the emission factors for the type of kiln from the Compilation of Air Pollutant Emission Factors (AP-42) and the Alternative Control Techniques Document -- <u>NOx</u>NOx Emissions from Cement Manufacturing, as incorporated by reference in Section 217.104 of this Part;
 - ii) The site-specific emission factor developed from representative emissions testing, pursuant to 40 CFR 60, Appendix A, Methods 7, 7A, 7C, 7D, or 7E, incorporated by reference in Section 217.104 of this Part, based on a range of typical operating conditions. The owner or operator must establish that these operating conditions are representative, subject to approval by the Agency, and must certify that the emissions testing is being conducted under representative conditions; or
 - iii) An alternate method for establishing the emissions factors, when submitted with supporting data to substantiate such emissions factors and approved by the Agency as set forth in subsection (a)(3)(C) of this Section.
- C) The owner or operator must submit an emission reduction plan to the Agency and obtain approval of that plan by the Agency. Such plan shall be effective only when contained as federally enforceable conditions in a permit. Such plan shall include any alternate procedures for monitoring, testing, reporting, or

recordkeeping approved by the Agency, or other provisions as appropriate.

- 4) Any kiln subject to this Subpart that commenced operation on or after January 1, 1996, must meet the more stringent of the requirements of this Subpart or other CAA requirements, or rules promulgated thereunder, applicable to kilns. If a kiln is required to comply with a more stringent requirement pursuant to the CAA, and chooses to do so in lieu of complying with this Subpart, the owner or operator must submit an emissions reduction plan that demonstrates that compliance with the CAA requirement results in emissions reductions that are equal to or exceed the requirements of this Section and obtain a permit containing federally enforceable conditions addressing such CAA requirement.
- 5) The owner or operator obtains an alternate emissions standard for operating the kiln pursuant to Section 28.1 of the Act (415 ILCS 5/28.1), and in accordance with 35 Ill. Adm. Code 104, Subpart D106, Subpart G, provisions for adjusted standards. An adjusted standard or alternate emissions standard with an alternate compliance schedule shall be granted by the Board to the extent consistent with federal law. Such alternate shall be effective only when included as a federally enforceable condition in a permit approved by USEPA or approved as a SIP revision. The adjusted standard shall include any alternate procedures for control, compliance, monitoring, operation, testing, reporting, or recordkeeping that are appropriate. In addition, the owner or operator must demonstrate, as justification for the adjusted standard, that the control requirements contained in this Subpart, as they apply to cement kilns, meet one or more of the following criteria:
 - <u>A)</u> <u>Unreasonable cost of control resulting from plant, age, location</u> or basic process design;
 - <u>B)</u> <u>Physical impossibility of installing necessary control equipment;</u> <u>or</u>
 - <u>C)</u> Other factors specific to the cement kiln that support an alternate emissions standard.
- <u>6)</u> The owner or operator obtains approval by the Agency and USEPA to allow the kiln to participate in the federal NO_xNO_x Trading Program. Such participation will be effective upon issuance of a permit containing all necessary federally enforceable permit conditions addressing the kiln's participation in the federal NO_xNO_x Trading Program pursuant to 40 CFR 96 and either Subpart W of 35 Ill. Adm. Code Part 217, NO_xNO_x Trading Program for Electrical Generating Units, Sections

217.750 et seq. or Subpart U of 35 Ill. Adm. Code Part 217, NO_x Control and Trading Programs for Specified NO_x Generating Units, Sections 217.650 et seq. The owner or operator is not subject to the requirements of this Subpart for the duration of its participation in the $NO_x NO_x$ Trading Program, except for the requirement to submit the initial compliance report pursuant to Section 217.608(a) of this Subpart.

b) Notwithstanding any other provisions of this Subpart, a source and units at the source subject to the provisions of subsection (a) of this Section will become subject to this Subpart on the first day of the control season subsequent to the calendar year in which all of the other states subject to the provisions of the NO_x SIP Call (63 Fed. Reg. 57,355 (October 27, 1998)) that are located in USEPA Region V or that are contiguous to Illinois have adopted regulations to implement NO_x trading programs and other required reductions of NO_x emissions pursuant to the NO_x SIP Call, and such regulations have received final approval by USEPA as part of the respective states' SIPS for ozone, or a final FIP for ozone promulgated by USEPA is effective for such other states. THE FIRST DAY OF THE CONTROL SEASON SUBSEQUENT TO THE CALENDAR YEAR IN WHICH ALL OF THE OTHER STATES SUBJECT TO THE PROVISIONS OF THE NOX SIP CALL (63 Fed. Reg. 57.355 (October 27, 1998)) THAT ARE LOCATED IN REGION V OR THAT ARE CONTIGUOUS TO ILLINOIS HAVE ADOPTED REGULATIONS TO IMPLEMENT NOX TRADING PROGRAMS AND OTHER REQUIRED REDUCTIONS OF NOX EMISSIONS PURSUANT TO THE NOX SIP CALL. AND SUCH REGULATIONS HAVE RECEIVED FINAL APPROVAL BY USEPA AS PART OF THE RESPECTIVE STATES' SIPS FOR OZONE, OR A FINAL FIP FOR OZONE PROMULGATED BY USEPA IS EFFECTIVE FOR SUCH OTHER STATES. [415 ILCS 5/9.9(f)]

(Source: Added at 25 Ill. Reg. _____, effective _____)

Section 217.604 Testing

- a) Any owner or operator of a kiln that commenced operation prior to May 1, <u>2003</u>2002, and using a low-<u>NOx</u>NOx burner or mid-kiln firing system to demonstrate compliance pursuant to Section 217.602(a)(1) of this Subpart must maintain and operate the device according to the manufacturer's specifications as approved by the Agency.
- b) Any owner or operator of a kiln that commenced operation prior to May 1, 20032002, and demonstrating compliance pursuant to Section 217.602(a)(2), (a)(3)(C), or (a)(5) of this Subpart must complete an initial performance test between May 1, 20032002, and May 30, 2004 April 30, 2003, and subsequent annual testing during each control period in which the kiln is operated. This testing must be consistent with the requirements of 40 CFR 60, Appendix A,

Methods 7, 7A, 7C, 7D, or 7E, incorporated by reference in Section 217.104 of this Part, or such alternate test method that has been approved by the Agency pursuant to Section 217.602(a)(3)(C) of this Subpart or the Board pursuant to Section 217.602(a)(5) of this Subpart.

c) The owner or operator of a kiln that commences operation on or after May 1, 20032002, must complete, as appropriate, an initial performance test within one year of initial startup and subsequent annual testing during each control period in which the kiln is operated. This testing must be consistent with the test methods listed in subsection (b) of this Section.

(Source: Added at <u>25</u> Ill. Reg. _____, effective _____)

Section 217.606 Monitoring

- a) The owner or operator of a kiln subject to this Subpart must submit a complete monitoring plan addressing the applicable requirements of subsection (b) of this Section to the Agency and obtain approval of such plan by the Agency. The monitoring plan shall identify the operating conditions to be monitored and the records to be maintained under Section 217.610 of this Subpart. For any kiln that commences operation on or before <u>August 31, 2003</u><u>August 1, 2002</u>, such plan shall be submitted on or before <u>August 31, 2003</u><u>August 1, 2002</u>. For any other kiln subject to this Subpart, such plan shall be submitted with the construction permit application for such kiln. Such plan will be effective only when included as federally enforceable conditions in a permit issued by the <u>Agency</u>.
- b) The plan must:
 - 1) Identify the specific operating conditions to be monitored and the correlation between the operating conditions and <u>NO_xNO_x emission</u> rates;
 - 2) Include the data and information that the owner or operator used to identify the correlation between $NO_x NOx$ emission rates and these operating conditions;
 - 3) Identify how the owner or operator will monitor these operating conditions on an hourly or other basis, as approved by the Agency, the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate, and the type and format of the records of these operating conditions that will be maintained by the owner or operator under Section 217.610 of this Subpart;

- 4) If operating a low-<u>NOx</u>NOx burner or mid-kiln firing system, the plan must include only monitoring the parameters indicated in the manufacturer's specifications and recommendations for the low-<u>NOx</u>NOx burner or mid-kiln firing system as approved by the Agency; and
- 5) Notwithstanding the requirements of subsections (b)(1) and (b)(2) of this subsection requiring the monitoring of operating parameters, if the owner or operator elects to monitor NO_xNOx emissions using a continuous emissions monitoring system (CEMS), the owner or operator must submit a monitoring plan subject to approval by the Agency which contains the applicable provisions of 40 CFR § 60.13 and of Method 7E in Appendix A contained in 40 CFR part 60, as incorporated by reference in Section 217.104 of this Part, and additional provisions regarding accuracy, data capture, and monitoring frequency.
- <u>c)</u> The owner or operator must monitor the operating parameters of the emission unit and predict $\underline{NO_x}$ emission rates in accordance with the plan specified in the applicable operating permit.

(Source: Added at 25 Ill. Reg. _____, effective _____)

Section 217.608 Reporting

- a) By May 31, 2004May 1, 2003, or within one year of initial startup, whichever occurs later, the owner or operator of a kiln subject to the requirements of this Subpart must submit to the Agency an initial compliance certification for each kiln subject to the requirements of Section 217.602 of this Subpart. This certification must contain the following information as applicable:
 - 1) The identity and type of each kiln subject to this Subpart, the name and address of the plant where the kiln is located, and the name and telephone number of the person responsible for demonstrating compliance with this Subpart;
 - 2) A demonstration that each kiln is in compliance with Section 217.602 of this Subpart, identifies the provision with which it is complying and is accompanied by a summary of the approved compliance method, e.g., performance test for the kiln and other supporting data being relied upon by the owner or operator;
 - 3) If demonstrating compliance by use of a low-<u>NOx</u> burner or midkiln firing system pursuant to Section 217.602(a)(1) of this Subpart, a copy of the manufacturer's recommended maintenance and schedule for maintenance as approved by the Agency;

- 4) If demonstrating compliance pursuant to Section 217.602(a)(3)(C) or (a)(5) of this Subpart, the date on which the permit containing the emission reduction plan or SIP revision was received as federally enforceable conditions; and
- 5) If demonstrating compliance pursuant to Section 217.602(a)(6) of this Subpart, the date of issuance and the identification of the permit authorizing, through federally enforceable conditions, participation in the federal <u>NO_xNO_x</u> trading program.
- b) Beginning in 20042003, by December 31 of each year, owners and operators complying with this Subpart pursuant to Section 217.602(a)(1), (a)(2), (a)(3), (a)(4), or (a)(5), must, as a seasonal component of its annual emission report pursuant to 35 Ill. Adm. Code 254, report the total <u>NO_xNO_x</u> emissions of each subject kiln during the control period of each year to the Agency, if the kiln operated during this period.

(Source: Added at 25 Ill. Reg. _____, effective _____)

Section 217.610 Recordkeeping

- <u>a)</u> <u>Any owner or operator of a cement kiln subject to this Subpart must produce</u> and maintain records that include, but are not limited to:
 - 1) Emissions in pounds of $NO_x NO_x$ per ton of clinker produced from each kiln subject to the requirements of Section 217.602(a)(2), (a)(3)(C) or (a)(5) of this Subpart;
 - 2) The date, time, and duration of any startup, shutdown, or malfunction in the operation of any cement kiln subject to this Subpart or any emissions monitoring equipment. The records shall include a description of the malfunction and maintenance activity;
 - 3) If operating a low-<u>NOx</u> burner or mid-kiln firing system; the date, time and duration of any regularly scheduled maintenance, with a description of the activity, and tons of clinker produced from each kiln;
 - 4) The results of any required performance testing;
 - 5) Daily cement kiln clinker production in tons per day; and
 - 6) The records of monitoring required by Section 217.606 of this Subpart.

b) All records required to be produced or maintained shall be retained on site for a minimum of three years and be made available to the Agency upon request.

(Source: Added at 25 Ill. Reg. _____, effective _____)

IT IS SO ORDERED.

Board Member S.T. Lawton, Jr. abstained.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, do hereby certify that the above opinion and order was adopted on the 21st day of December 2000 by a vote of 6-0.

Dorothy Mr. Gur

Dorothy M. Gunn, Clerk Illinois Pollution Control Board