

ILLINOIS POLLUTION CONTROL BOARD
April 19, 2007

IN THE MATTER OF:)
)
NO_x EMISSIONS FROM STATIONARY) R07-18
RECIPROCATING INTERNAL) (Rulemaking - Air)
COMBUSTION ENGINES AND TURBINES:))
AMENDMENTS TO 35 ILL. ADM. CODE))
SECTION 201.146 AND PARTS 211 and 217))

Proposed Rule. First Notice.

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

On April 6, 2007, the Illinois Environmental Protection Agency (Agency) filed this proposal for rulemaking (Prop.). The proposal is filed pursuant to Sections 9.9, 10, 27, and 28.5 of the Environmental Protection Act (Act) (415 ILCS 5/9.9, 10, 27, and 28 (2004)). The Agency intends this proposal to satisfy Illinois' obligations under the United States Environmental Protection Agency's (USEPA) nitrogen oxides (NO_x) State Implementation Plan (SIP) Call Phase II. Specifically, the Agency proposes to reduce intrastate and interstate transport of NO_x emissions on an annual basis and on an ozone season basis by reducing NO_x emissions from stationary reciprocating internal combustion engines and turbines.

The proposal indicates that the rulemaking is intended in part to address certain obligations of the State under the federal Clean Air Act (CAA) (42 U.S.C. § 7401 *et seq.*). Specifically, the proposal addresses requirements for reasonable further progress (RFP), reasonably available control technology (RACT), rate of progress (ROP), and attainment demonstrations for the National Ambient Air Quality Standards (NAAQS) for eight-hour ozone and particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM_{2.5}).

The Agency filed this proposal pursuant to Section 28.5 of the Act (415 ILCS 5/28.5 (2004)), and the Board accepts the proposal for hearing. Section 28.5 of the Act (415 ILCS 5/28.5 (2004)) requires the Board to proceed toward adoption of the proposed regulation by meeting a series of strict deadlines. The Act provides the Board no discretion to extend those deadlines. *See* 415 ILCS 5/28.5 (2004).

The first of those strict deadlines provides that the Board must "within 14 days of receipt of the proposal" (415 ILCS 5/28.5(f) (2004)) file the proposed rule for first notice under the Illinois Administrative Procedure Act (5 ILCS 100/1-1 *et seq.* (2004)). Therefore, the Board today accepts the proposal without commenting on the merits of the proposal and sends the proposed rule to first notice.

In that same 14-day period, the Board must also schedule all required hearings on the proposed rule. 415 ILCS 5/28.5(f) (2004). The Board within 55 days of accepting the proposal

must hold a first hearing “confined to testimony by and questions of the Agency’s witnesses concerning the scope, applicability, and basis of the rule.” 415 ILCS 5/28.5(g)(1) (2004). “Within 7 days after the first hearing, any person may request that the second hearing be held.” 415 ILCS 5/28.5(g)(1) (2004). A second hearing beginning must commence within 30 days of the first day of the first hearing and “shall be devoted to presentation of testimony, documents, and comments by affected entities and all other interested parties.” 415 ILCS 5/28.5(g)(2) (2004). A third hearing must commence within 14 days after the first day of the second hearing and “shall be devoted solely to any Agency response to the material submitted at the second hearing and to any response by other parties.” 415 ILCS 5/28.5(g)(3) (2004). The Board will cancel the third hearing if the Agency indicates to the Board that the Agency will not introduce any additional materials. *Id.* Hearings continue day to day as necessary to complete the subject matter of the hearing. 415 ILCS 5/2.5(g) (2004). The Board directs the hearing officer expeditiously to schedule all hearings in this proceeding according to the following statutory deadlines:

First Notice	on or before April 20, 2007 (415 ILCS 5/28.5(f) (2004))
First Hearing	on or before May 31, 2007 (415 ILCS 5/28.5(g)(1) (2004))
Second Hearing	on or before June 30, 2007 (415 ILCS 5/28.5(g)(2) (2004))
Third Hearing	on or before July 14, 2007 (415 ILCS 5/28.5(g)(3) (2004))
Second Notice	on or before August 14, 2007 or September 3, 2007 (415 ILCS 5/28.5(o) (2004))
Final Filing	21 days after receipt of Joint Committee on Administrative Rules certificate of no objection (<i>see</i> 415 ILCS 5/28.5(p) (2004))

In addition to the proposal, the Agency filed a motion for waiver of copy requirements. Specifically, the Agency seeks leave to file: (1) four complete copies and five partial copies of the proposal; (2) no copies of documents the Agency relied upon in the development of the proposal or upon which it intends to rely at hearing, each of which the Agency characterizes as readily available to the Board or already in the Board’s possession; and (3) no copies of the documents the Agency has incorporated by reference in developing this proposal, each of which the Agency characterizes as readily available to the Board or already in the Board’s possession.

The Board grants the Agency’s motion for waiver of copy requirements and waives the requirement to file nine copies of the materials. The Board notes that the documents which the Agency seeks leave not to file are public documents readily accessible to the Board and the public.

The Board notes that it has made non-substantive changes to the text of the proposed rule. For example, the Board has added underscoring to new text that the Agency seeks to add to Part 217. *See* 35 Ill. Adm. Code 102.202(a). Second, the Board has added the full existing background text for the Agency’s proposed amendment to Section 201.146. *Id.* Also, where section titles in a proposed table of contents were not consistent with the titles in the proposed rules, the Board has amended the table of contents to reflect the title shown in the text of the proposed rules.

On April 16, 2007, the Board received from ANR Pipeline, Natural Gas Pipeline Company, Trunkline Gas Company, and Panhandle Eastern Pipeline Company their “Objection to Use of Section 28.5 Fast Track Procedures for Consideration of Nitrogen Oxide Proposal as Filed.” On April 17, 2007, the Board received from the Illinois Environmental Regulatory Group its “Objection to Use of Section 28.5 ‘Fast-Track’ Rulemaking for the Illinois Environmental Protection Agency’s Proposed Rules.” These two objections are not ripe for consideration today, because the response period has not elapsed. *See* 35 Ill. Adm. Code 101.500(d). Until it rules on the pending objections, the Board will proceed under the requirements of Section 28.5 of the Act (415 ILCS 5/28.5 (2004)). To ensure that this rulemaking proceeds expeditiously, the Board directs that any response to the objections be filed by Tuesday, May 1, 2007, and the mailbox rule of 35 Adm. Code 101 .300(c) does not apply. The objectors may reply to the responses by Tuesday, May 8, 2007, and the mailbox rule of 35 Ill. Adm. Code 101 300(c) does not apply.

ORDER

The Board directs the Clerk to cause the publication of the following rule for first notice in the *Illinois Register*.

TITLE 35: ENVIRONMENTAL PROTECTION
 SUBTITLE B: AIR POLLUTION
 CHAPTER I: POLLUTION CONTROL BOARD
 SUBCHAPTER a: PERMITS AND GENERAL PROVISIONS

PART 201
 PERMITS AND GENERAL PROVISIONS

SUBPART A: DEFINITIONS

Section	
201.101	Other Definitions
201.102	Definitions
201.103	Abbreviations and Units
201.104	Incorporations by Reference

SUBPART B: GENERAL PROVISIONS

Section	
201.121	Existence of Permit No Defense
201.122	Proof of Emissions
201.123	Burden of Persuasion Regarding Exceptions
201.124	Annual Report
201.125	Severability
201.126	Repealer

SUBPART C: PROHIBITIONS

Section	
201.141	Prohibition of Air Pollution
201.142	Construction Permit Required
201.143	Operating Permits for New Sources
201.144	Operating Permits for Existing Sources
201.146	Exemptions from State Permit Requirements
201.147	Former Permits
201.148	Operation Without Compliance Program and Project Completion Schedule
201.149	Operation During Malfunction, Breakdown or Startups
201.150	Circumvention
201.151	Design of Effluent Exhaust Systems

SUBPART D: PERMIT APPLICATIONS AND REVIEW PROCESS

Section	
201.152	Contents of Application for Construction Permit
201.153	Incomplete Applications (Repealed)
201.154	Signatures (Repealed)
201.155	Standards for Issuance (Repealed)
201.156	Conditions
201.157	Contents of Application for Operating Permit
201.158	Incomplete Applications
201.159	Signatures
201.160	Standards for Issuance
201.161	Conditions
201.162	Duration
201.163	Joint Construction and Operating Permits
201.164	Design Criteria
201.165	Hearings
201.166	Revocation
201.167	Revisions to Permits
201.168	Appeals from Conditions
201.169	Special Provisions for Certain Operating Permits
201.170	Portable Emission Units

SUBPART E: SPECIAL PROVISIONS FOR OPERATING PERMITS FOR CERTAIN SMALLER SOURCES

Section	
201.180	Applicability (Repealed)
201.181	Expiration and Renewal (Repealed)
201.187	Requirement for a Revised Permit (Repealed)

SUBPART F: CAAPP PERMITS

Section	
201.207	Applicability
201.208	Supplemental Information
201.209	Emissions of Hazardous Air Pollutants
201.210	Categories of Insignificant Activities or Emission Levels
201.211	Application for Classification as an Insignificant Activity
201.212	Revisions to Lists of Insignificant Activities or Emission Levels

SUBPART G: EXPERIMENTAL PERMITS
(Reserved)

SUBPART H: COMPLIANCE PROGRAMS AND PROJECT COMPLETION SCHEDULES

Section	
201.241	Contents of Compliance Program
201.242	Contents of Project Completion Schedule
201.243	Standards for Approval
201.244	Revisions
201.245	Effects of Approval
201.246	Records and Reports
201.247	Submission and Approval Dates

SUBPART I: MALFUNCTIONS, BREAKDOWNS OR STARTUPS

Section	
201.261	Contents of Request for Permission to Operate During a Malfunction, Breakdown or Startup
201.262	Standards for Granting Permission to Operate During a Malfunction, Breakdown or Startup
201.263	Records and Reports
201.264	Continued Operation or Startup Prior to Granting of Operating Permit
201.265	Effect of Granting of Permission to Operate During a Malfunction, Breakdown or Startup

SUBPART J: MONITORING AND TESTING

Section	
201.281	Permit Monitoring Equipment Requirements
201.282	Testing
201.283	Records and Reports

SUBPART K: RECORDS AND REPORTS

Section	
201.301	Records

201.302 Reports

SUBPART L: CONTINUOUS MONITORING

Section
 201.401 Continuous Monitoring Requirements
 201.402 Alternative Monitoring
 201.403 Exempt Sources
 201.404 Monitoring System Malfunction
 201.405 Excess Emission Reporting
 201.406 Data Reduction
 201.407 Retention of Information
 201.408 Compliance Schedules

201.APPENDIX A Rule into Section Table
 201.APPENDIX B Section into Rule Table
 201.APPENDIX C Past Compliance Dates

AUTHORITY: Implementing Sections 10, 39, and 39.5 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/10, 27, 28.5, 39, and 39.5].

SOURCE: Adopted as Chapter 2: Air Pollution, Part I: General Provisions, in R71-23, 4 PCB 191, filed and effective April 14, 1972; 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. 13579; amended in R82-1 (Docket A) at 10 Ill. Reg. 12628, effective July 7, 1986; amended in R87-38 at 13 Ill. Reg. 2066, effective February 3, 1989; amended in R89-7(A) at 13 Ill. Reg. 19444, effective December 5, 1989; amended in R89-7(B) at 15 Ill. Reg. 17710, effective November 26, 1991; amended in R93-11 at 17 Ill. Reg. 21483, effective December 7, 1993; amended in R94-12 at 18 Ill. Reg. 15002, effective September 21, 1994; amended in R94-14 at 18 Ill. Reg. 15760, effective October 17, 1994; amended in R96-17 at 21 Ill. Reg. 7878, effective June 17, 1997; amended in R98-13 at 22 Ill. Reg. 11451, effective June 23, 1998; amended in R98-28 at 22 Ill. Reg. 11823, effective July 31, 1998; amended in R02-10 at 27 Ill. Reg. 5820, effective March 21, 2003; amended in R05-19 and R05-20 at 30 Ill. Reg. 4901, effective March 3, 2006; amended in R07-18 at 31 Ill. Reg. _____, effective _____.

SUBPART C: PROHIBITIONS

Section 201.146 Exemptions from State Permit Requirements

Construction or operating permits, pursuant to Sections 201.142, 201.143 and 201.144 of this Part, are not required for the classes of equipment and activities listed below in this Section. The permitting exemptions in this Section do not relieve the owner or operator of any source from any obligation to comply with any other applicable requirements, including the obligation to

obtain a permit pursuant to Sections 9.1(d) and 39.5 of the Act, Sections 165, 173 and 502 of the Clean Air Act or any other applicable permit or registration requirements.

- a) Air contaminant detectors or recorders, combustion controllers or combustion shutoffs;
- b) Air conditioning or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment;
- c) Each fuel burning emission unit for indirect systems and for heating and reheating furnace systems used exclusively for residential, or commercial establishments using gas and/or fuel oil exclusively with a design heat input capacity of less than 14.6 MW (50 mmbtu/hr), except that a permit shall be required for any such emission unit with a design heat input capacity of at least 10 mmbtu/hr that was constructed, reconstructed or modified after June 9, 1989 and that is subject to 40 CFR 60, Subpart D;
- d) Each fuel burning emission unit other than those listed in subsection (c) of this Section for direct systems used for comfort heating purposes and indirect heating systems with a design heat input capacity of less than 2930 kW (10 mmbtu/hr);
- e) Internal combustion engines or boilers (including the fuel system) of motor vehicles, locomotives, air craft, watercraft, lifttrucks and other vehicles powered by nonroad engines;
- f) Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated laboratory fume hoods, vacuum producing devices and control devices installed primarily to address potential accidental releases;
- g) Coating operations located at a source using not in excess of 18,925 l (5,000 gal) of coating (including thinner) per year;
- h) Any emission unit acquired exclusively for domestic use, except that a permit shall be required for any incinerator and for any fuel combustion emission unit using solid fuel with a design heat input capacity of 14.6 MW (50 mmbtu/hr) or more;
- i) Any stationary turbine or internal combustion engine with a rated power output of less than 1118 kW (1500 ~~bhp horsepower~~), except that a permit shall be required for the following:
 - 1) ~~Any~~ stationary gas turbine ~~engine~~ with a rated heat input at peak load of 10.7 gigajoules/hr (10 mmbtu/hr) or more that is constructed, reconstructed or modified after October 3, 1977 and that is subject to requirements of 40 CFR 60, Subpart GG; or

- 2) Any internal combustion engine with a rating at equal to or greater than 500 bhp output that is subject to the control requirements of 35 Ill. Adm. Code Part 217.Subpart Q.
- j) Rest room facilities and associated cleanup operations, and stacks or vents used to prevent the escape of sewer gases through plumbing traps;
- k) Safety devices designed to protect life and limb, provided that a permit is not otherwise required for the emission unit with which the safety device is associated;
- l) Storage tanks for liquids for retail dispensing except for storage tanks that are subject to the requirements of 35 Ill. Adm. Code 215.583(a)(2), 218.583(a)(2) or 219.583(a)(2);
- m) Printing operations with aggregate organic solvent usage that never exceeds 2,839 l (750 gal) per year from all printing lines at the source, including organic solvent from inks, diluents, fountain solutions and cleaning materials;
- n) Storage tanks of:
- 1) Organic liquids with a capacity of less than 37,850 l (10,000 gal), provided the storage tank is not used to store any material listed as a hazardous air pollutant pursuant to Section 112(b) of the Clean Air Act, and provided the storage tank is not subject to the requirements of 35 Ill. Adm. Code 215.583(a)(2), 218.583(a)(2) or 219.583(a)(2);
 - 2) Any size containing exclusively soaps, detergents, surfactants, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials; or
 - 3) Any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil or residual fuel oils.
- o) Threaded pipe connections, vessel manways, flanges, valves, pump seals, pressure relief valves, pressure relief devices and pumps;
- p) Sampling connections used exclusively to withdraw materials for testing and analyses;
- q) All storage tanks of Illinois crude oil with capacity of less than 151,400 l (40,000 gal) located on oil field sites;

- r) All organic material-water single or multiple compartment effluent water separator facilities for Illinois crude oil of vapor pressure of less than 34.5 kPa absolute (5 psia);
- s) Grain-handling operations, exclusive of grain-drying operations, with an annual grain through-put not exceeding 300,000 bushels;
- t) Grain-drying operations with a total grain-drying capacity not exceeding 750 bushels per hour for 5% moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers;
- u) Portable grain-handling equipment and one-turn storage space;
- v) Cold cleaning degreasers that are not in-line cleaning machines, where the vapor pressure of the solvents used never exceeds 2 kPa (15 mmHg or 0.3 psi) measured at 38°C (100°F) or 0.7 kPa (5 mmHg or 0.1 psi) at 20°C (68°F);
- w) Coin-operated dry cleaning operations;
- x) Dry cleaning operations at a source that consume less than 30 gallons per month of perchloroethylene;
- y) Brazing, soldering, wave soldering or welding equipment, including associated ventilation hoods;
- z) Cafeterias, kitchens, and other similar facilities, including smokehouses, used for preparing food or beverages, but not including facilities used in the manufacturing and wholesale distribution of food, beverages, food or beverage products, or food or beverage components;
- aa) Equipment for carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, sand blast cleaning, shot blasting, shot peening, or polishing ceramic artwork, leather, metals (other than beryllium), plastics, concrete, rubber, paper stock, wood or wood products, where such equipment is either:
 - 1) Used for maintenance activity;
 - 2) Manually operated;
 - 3) Exhausted inside a building; or
 - 4) Vented externally with emissions controlled by an appropriately operated cyclonic inertial separator (cyclone), filter, electro-static precipitator or a scrubber.

- bb) Feed mills that produce no more than 10,000 tons of feed per calendar year, provided that a permit is not otherwise required for the source pursuant to Section 201.142, 201.143 or 201.144;
- cc) Extruders used for the extrusion of metals, minerals, plastics, rubber or wood, excluding:
 - 1) Extruders used in the manufacture of polymers;
 - 2) Extruders using foaming agents or release agents that contain volatile organic materials or Class I or II substances subject to the requirements of Title VI of the Clean Air Act; and
 - 3) Extruders processing scrap material that was produced using foaming agents containing volatile organic materials or Class I or II substances subject to the requirements of Title VI of the Clean Air Act.
- dd) Furnaces used for melting metals, other than beryllium, with a brim full capacity of less than 450 cubic inches by volume;
- ee) Equipment used for the melting or application of less than 22,767 kg/yr (50,000 lbs/yr) of wax to which no organic solvent has been added;
- ff) Equipment used for filling drums, pails or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials;
- gg) Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials;
- hh) Equipment used for the mixing and blending of materials at ambient temperatures to make water based adhesives, provided each material mixed or blended contains less than 5% organic solvent by weight;
- ii) Die casting machines where a metal or plastic is formed under pressure in a die located at a source with a through-put of less than 2,000,000 lbs of metal or plastic per year, in the aggregate, from all die casting machines;
- jj) Air pollution control devices used exclusively with other equipment that is exempt from permitting, as provided in this Section;

- kk) An emission unit for which a registration system designed to identify sources and emission units subject to emission control requirements is in place, such as the registration system found at 35 Ill. Adm. Code 218.586 (Gasoline Dispensing Operations - Motor Vehicle Fueling Operations) and 35 Ill. Adm. Code 218, Subpart HH (Motor Vehicle Refinishing);
- ll) Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy;
- mm) Equipment used for hydraulic or hydrostatic testing;
- nn) General vehicle maintenance and servicing activities conducted at a source, motor vehicle repair shops, and motor vehicle body shops, but not including:
 - 1) Gasoline fuel handling; and
 - 2) Motor vehicle refinishing.
- oo) Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing, provided no organic solvent has been added to the water;
- pp) Administrative activities including, but not limited to, paper shredding, copying, photographic activities and blueprinting machines. This does not include incinerators;
- qq) Laundry dryers, extractors, and tumblers processing that have been cleaned with water solutions of bleach or detergents that are:
 - 1) Located at a source and process clothing, bedding and other fabric items used at the source, provided that any organic solvent present in such items before processing that is retained from cleanup operations shall be addressed as part of the VOM emissions from use of cleaning materials;
 - 2) Located at a commercial laundry; or
 - 3) Coin operated.
- rr) Housekeeping activities for cleaning purposes, including collecting spilled and accumulated materials, including operation of fixed vacuum cleaning systems specifically for such purposes, but not including use of cleaning materials that contain organic solvent;
- ss) Refrigeration systems, including storage tanks used in refrigeration systems, but excluding any combustion equipment associated with such systems;

- tt) Activities associated with the construction, on-site repair, maintenance or dismantlement of buildings, utility lines, pipelines, wells, excavations, earthworks and other structures that do not constitute emission units;
- uu) Piping and storage systems for natural gas, propane and liquefied petroleum gas;
- vv) Water treatment or storage systems, as follows:
 - 1) Systems for potable water or boiler feedwater;
 - 2) Systems, including cooling towers, for process water, provided that such water has not been in direct or indirect contact with process streams that contain volatile organic material or materials listed as hazardous air pollutants pursuant to Section 112(b) of the Clean Air Act.
- ww) Lawn care, landscape maintenance and grounds keeping activities;
- xx) Containers, reservoirs or tanks used exclusively in dipping operations to coat objects with oils, waxes or greases, provided no organic solvent has been mixed with such materials;
- yy) Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 USC ~~U.S.C.~~ 1261 et seq.), where the product is used at a source in the same manner as normal consumer use;
- zz) Activities directly used in the diagnosis and treatment of disease, injury or other medical condition;
- aaa) Activities associated with the construction, repair or maintenance of roads or other paved or open areas, including operation of street sweepers, vacuum trucks, spray trucks and other vehicles related to the control of fugitive emissions of such roads or other areas;
- bbb) Storage and handling of drums or other transportable containers, where the containers are sealed during storage and handling;
- ccc) Activities at a source associated with the maintenance, repair or dismantlement of an emission unit or other equipment installed at the source, not including the shutdown of the unit or equipment, including preparation for maintenance, repair or dismantlement, and preparation for subsequent startup, including preparation of a shutdown vessel for entry, replacement of insulation, welding and cutting, and steam purging of a vessel prior to startup;
- ddd) Equipment used for corona arc discharge surface treatment of plastic with a power rating of 5 kW or less or equipped with an ozone destruction device;

- eee) Equipment used to seal or cut plastic bags for commercial, industrial or domestic use;
- fff) Each direct-fired gas dryer used for a washing, cleaning, coating or printing line, excluding:
 - 1) Dryers with a rated heat input capacity of 2930 kW (10 mmbtu/hr) or more; and
 - 2) Dryers for which emissions other than those attributable to combustion of fuel in the dryer, including emissions attributable to use or application of cleaning agents, washing materials, coatings or inks or other process materials that contain volatile organic material are not addressed as part of the permitting of such line, if a permit is otherwise required for the line;
- ggg) Municipal solid waste landfills with a maximum total design capacity of less than 2.5 million Mg or 2.5 million m³ that are not required to install a gas collection and control system pursuant to 35 Ill. Adm. Code 220 or 800 through 849 or Section 9.1 of the Act; and
- hhh) Replacement or addition of air pollution control equipment for existing emission units in circumstances where:
 - 1) The existing emission unit is permitted and has operated in compliance for the past year;
 - 2) The new control equipment will provide equal or better control of the target pollutants;
 - 3) The new control device will not be accompanied by a net increase in emissions of any non-targeted criteria air pollutant;
 - 4) Different State or federal regulatory requirements or newly proposed regulatory requirements will not apply to the unit; and
BOARD NOTE: All sources must comply with underlying federal regulations and future State regulations.
 - 5) Where the existing air pollution control equipment had required monitoring equipment, the new air pollution control equipment will be equipped with the instrumentation and monitoring devices that are typically installed on the new equipment of that type.
BOARD NOTE: For major sources subject to Section 39.5 of the Act, where the new air pollution control equipment will require a different compliance determination method in the facility's CAAPP permit, the

facility may need a permit modification to address the changed compliance determination method.

- iii) Replacement, addition, or modification of emission units at facilities with federally enforceable State operating permits limiting their potential to emit in circumstances where:
- 1) The potential to emit any regulated air pollutant in the absence of air pollution control equipment from the new emission unit, or the increase in the potential to emit resulting from the modification of any existing emission unit, is less than 0.1 pound per hour or 0.44 tons per year;
 - 2) The raw materials and fuels used or present in the emission unit that cause or contribute to emissions, based on the information contained in Material Safety Data Sheets for those materials, do not contain equal to or greater than 0.01 percent by weight of any hazardous air pollutant as defined under Section 112(b) of the federal Clean Air Act;
 - 3) The emission unit or modification is not subject to an emission standard or other regulatory requirement pursuant to Section 111 of the federal Clean Air Act;
 - 4) Potential emissions of regulated air pollutants from the emission unit or modification will not, in combination with emissions from existing units or other proposed units, trigger permitting requirements under Section 39.5, permitting requirements under Section 165 or 173 of the federal Clean Air Act, or the requirement to obtain a revised federally enforceable State operating permit limiting the source's potential to emit; and
 - 5) The source is not currently the subject of a Non-compliance Advisory, Clean Air Act Section 114 Request, Violation Notice, Notice of Violation, Compliance Commitment Agreement, Administrative Order, or civil or criminal enforcement action, related to the air emissions of the source.
- jjj) Replacement, addition, or modification of emission units at permitted sources that are not major sources subject to Section 39.5 and that do not have a federally enforceable state operating permit limiting their potential to emit, in circumstances where:
- 1) The potential to emit of any regulated air pollutant in the absence of air pollution control equipment from the new emission unit, or the increase in the potential to emit resulting from the modification of any existing emission unit is either:
 - A) Less than 0.1 pound per hour or 0.44 tons per year; or

- B) Less than 0.5 pound per hour, and the permittee provides prior notification to the Agency of the intent to construct or install the unit. The unit may be constructed, installed or modified immediately after the notification is filed;
 - 2) The emission unit or modification is not subject to an emission standard or other regulatory requirement under Section 111 or 112 of the federal Clean Air Act;
 - 3) Potential emissions of regulated air pollutants from the emission unit or modification will not, in combination with the emissions from existing units or other proposed units, trigger permitting requirements under Section 39.5 or the requirement to obtain a federally enforceable permit limiting the source's potential to emit; and
 - 4) The source is not currently the subject of a Non-compliance Advisory, Clean Air Act Section 114 Request, Violation Notice, Notice of Violation, Compliance Commitment Agreement, Administrative Order, or civil or criminal enforcement action, related to the air emissions of the source.
- kkk) The owner or operator of a CAAPP source is not required to obtain an air pollution control construction permit for the construction or modification of an emission unit or activity that is an insignificant activity as addressed by Section 201.210 or 201.211 of this Part. Section 201.212 of this Part must still be followed, as applicable. Other than excusing the owner or operator of a CAAPP source from the requirement to obtain an air pollution control construction permit for the emission units or activities, nothing in this subsection shall alter or affect the liability of the CAAPP source for compliance with emission standards and other requirements that apply to the emission units or activities, either individually or in conjunction with other emission units or activities constructed, modified or located at the source.
- lll) Plastic injection molding equipment with an annual through-put not exceeding 5,000 tons of plastic resin in the aggregate from all plastic injection molding equipment at the source, and all associated plastic resin loading, unloading, conveying, mixing, storage, grinding, and drying equipment and associated mold release and mold cleaning agents.

(Source: Amended at 31 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 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
211.670	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
<u>211.740</u>	<u>Brakehorsepower (rated-bhp)</u>
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
211.1010	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
211.1370	Concrete Curing Compounds
211.1390	Concentrated Nitric Acid Manufacturing Process
211.1410	Condensate
211.1430	Condensable 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
<u>211.1740</u>	<u>Diesel Engine</u>
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
211.2360	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
211.2630	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
211.3300 Lean-Burn Engine
211.3310 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 Burner
211.3490 Low Solvent Coating
211.3500 Lubricating Oil

211.3510	Magnet Wire
211.3530	Magnet Wire Coating
211.3550	Magnet Wire Coating Line
211.3570	Major Dump Pit
211.3590	Major Metropolitan Area (MMA)
211.3610	Major Population Area (MPA)
211.3620	Manually Operated Equipment
211.3630	Manufacturing Process
211.3650	Marine Terminal
211.3660	Marine Vessel
211.3670	Material Recovery Section
211.3690	Maximum Theoretical Emissions
211.3695	Maximum True Vapor Pressure
211.3710	Metal Furniture
211.3730	Metal Furniture Coating
211.3750	Metal Furniture Coating Line
211.3770	Metallic Shoe-Type Seal
211.3780	Mid-Kiln Firing
211.3790	Miscellaneous Fabricated Product Manufacturing Process
211.3810	Miscellaneous Formulation Manufacturing Process
211.3830	Miscellaneous Metal Parts and Products
211.3850	Miscellaneous Metal Parts and Products Coating
211.3870	Miscellaneous Metal Parts or Products Coating Line
211.3890	Miscellaneous Organic Chemical Manufacturing Process
211.3910	Mixing Operation
211.3915	Mobile Equipment
211.3930	Monitor
211.3950	Monomer
211.3960	Motor Vehicles
211.3965	Motor Vehicle Refinishing
211.3970	Multiple Package Coating
211.3980	Nameplate Capacity
211.3990	New Grain-Drying Operation (Repealed)
211.4010	New Grain-Handling Operation (Repealed)
211.4030	No Detectable Volatile Organic Material Emissions
211.4050	Non-Contact Process Water Cooling Tower
211.4055	Non-Flexible Coating
211.4065	Non-Heatset
211.4067	NO _x Trading Program
211.4070	Offset
211.4090	One Hundred Percent Acid
211.4110	One-Turn Storage Space
211.4130	Opacity
211.4150	Opaque Stains
211.4170	Open Top Vapor Degreasing
211.4190	Open-Ended Valve

211.4210	Operator of a Gasoline Dispensing Operation or Operator of a Gasoline Dispensing Facility
211.4230	Organic Compound
211.4250	Organic Material and Organic Materials
211.4260	Organic Solvent
211.4270	Organic Vapor
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
211.4950.1	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
211.5210	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
<u>211.5640</u>	<u>Rich-Burn Engine</u>
211.5650	Ringelmann Chart
211.5670	Roadway
211.5690	Roll Coater
211.5710	Roll Coating
211.5730	Roll Printer

211.5750	Roll Printing
211.5770	Rotogravure Printing
211.5790	Rotogravure Printing Line
211.5810	Safety Relief Valve
211.5830	Sandblasting
211.5850	Sanding Sealers
211.5870	Screening
211.5880	Screen Printing on Paper
211.5890	Sealer
211.5910	Semi-Transparent Stains
211.5930	Sensor
211.5950	Set of Safety Relief Valves
211.5970	Sheet Basecoat
211.5980	Sheet-Fed
211.5990	Shotblasting
211.6010	Side-Seam Spray Coat
211.6025	Single Unit Operation
211.6030	Smoke
211.6050	Smokeless Flare
211.6060	Soft Coat
211.6070	Solvent
211.6090	Solvent Cleaning
211.6110	Solvent Recovery System
211.6130	Source
211.6140	Specialty Coatings
211.6145	Specialty Coatings for Motor Vehicles
211.6150	Specialty High Gloss Catalyzed Coating
211.6170	Specialty Leather
211.6190	Specialty Soybean Crushing Source
211.6210	Splash Loading
211.6230	Stack
211.6250	Stain Coating
211.6270	Standard Conditions
211.6290	Standard Cubic Foot (scf)
211.6310	Start-Up
211.6330	Stationary Emission Source
211.6350	Stationary Emission Unit
211.6355	Stationary Gas Turbine
211.6360	Stationary Reciprocating Internal Combustion Engine
211.6370	Stationary Source
211.6390	Stationary Storage Tank
211.6400	Stencil Coat
211.6410	Storage Tank or Storage Vessel
211.6420	Strippable Spray Booth Coating
211.6430	Styrene Devolatilizer Unit
211.6450	Styrene Recovery Unit

211.6470	Submerged Loading Pipe
211.6490	Substrate
211.6510	Sulfuric Acid Mist
211.6530	Surface Condenser
211.6540	Surface Preparation Materials
211.6550	Synthetic Organic Chemical or Polymer Manufacturing Plant
211.6570	Tablet Coating Operation
211.6580	Texture Coat
211.6590	Thirty-Day Rolling Average
211.6610	Three-Piece Can
211.6620	Three or Four Stage Coating System
211.6630	Through-the-Valve Fill
211.6650	Tooling Resin
211.6670	Topcoat
211.6690	Topcoat Operation
211.6695	Topcoat System
211.6710	Touch-Up
211.6720	Touch-Up Coating
211.6730	Transfer Efficiency
211.6750	Tread End Cementing
211.6770	True Vapor Pressure
211.6790	Turnaround
211.6810	Two-Piece Can
211.6830	Under-the-Cup Fill
211.6850	Undertread Cementing
211.6860	Uniform Finish Blender
211.6870	Unregulated Safety Relief Valve
211.6880	Vacuum Metallizing
211.6890	Vacuum Producing System
211.6910	Vacuum Service
211.6930	Valves Not Externally Regulated
211.6950	Vapor Balance System
211.6970	Vapor Collection System
211.6990	Vapor Control System
211.7010	Vapor-Mounted Primary Seal
211.7030	Vapor Recovery System
211.7050	Vapor-Suppressed Polyester Resin
211.7070	Vinyl Coating
211.7090	Vinyl Coating Line
211.7110	Volatile Organic Liquid (VOL)
211.7130	Volatile Organic Material Content (VOMC)
211.7150	Volatile Organic Material (VOM) or Volatile Organic Compound (VOC)
211.7170	Volatile Petroleum Liquid
211.7190	Wash Coat
211.7200	Washoff Operations
211.7210	Wastewater (Oil/Water) Separator
211.7230	Weak Nitric Acid Manufacturing Process

211.7250	Web
211.7270	Wholesale Purchase - Consumer
211.7290	Wood Furniture
211.7310	Wood Furniture Coating
211.7330	Wood Furniture Coating Line
211.7350	Woodworking
211.7400	Yeast Percentage

Appendix A Rule into Section Table

Appendix B Section into Rule Table

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 5/9, 9.1, 9.9, 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 R01-9 at 25 Ill. Reg. 128, effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4597, effective March 15, 2001; amended in R01-17 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. _____, effective _____.

SUBPART B: DEFINITIONS

Section 211.740 Brakehorsepower (rated-bhp)

“Brakehorsepower (bhp)” means the rated horsepower capacity of the engine as defined on the engine nameplate at standard conditions.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 211.1740 Diesel Engine

“Diesel engine” means for the purposes of 35 Ill. Adm. Code 217, Subpart Q, a compression ignited two- or four-stroke engine in which liquid fuel injected into the combustion chamber ignites when the air charge is compressed to a temperature sufficiently high for auto-ignition.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 211.1920 Emergency or Standby Unit

“Emergency or Standby Unit” means, for a stationary gas turbine or stationary reciprocating internal combustion engine, a unit that:

- a) Supplies power for the source at which it is located but operates only when the normal supply of power has been rendered unavailable by circumstances beyond the control of the owner or operator of the source and only as necessary to assure the availability of the engine or turbine. An emergency standby unit may not be operated to supplement a primary power source when the load capacity or rating of the primary power source has been reached or exceeded.;
- b) Operates exclusively for firefighting or flood control or both;
- c) Operates in response to and during the existence of any officially declared disaster or state of emergency.
- d) Operates for the purpose of testing, repair or routine maintenance to verify its readiness for emergency standby use.

The term does not include equipment used for purposes other than emergencies, as described above, such as to supply power during high electric demand days.

(Source: Amended at 31 Ill. Reg. _____, effective _____)

Section 211.3300 Lean-Burn Engine

“Lean-burn engine” means any spark-ignited engine that is not a rich-burn engine.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 211.5640 Rich-Burn Engine

“Rich-burn engine” means a spark-ignited engine where the oxygen content in the exhaust stream of the engine before any dilutions is 1 percent or less by volume measured on a dry basis.

(Source: Added at 31 Ill. Reg. _____, effective _____)

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

PART 217
NITROGEN OXIDES EMISSIONS
SUBPART A: GENERAL PROVISIONS

Section	
217.100	Scope and Organization
217.101	Measurement Methods
217.102	Abbreviations and Units
217.103	Definitions
217.104	Incorporations by Reference

SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

Section	
217.121	New Emission Sources

SUBPART C: EXISTING FUEL COMBUSTION EMISSION SOURCES

Section	
217.141	Existing Emission Sources in Major Metropolitan Areas

SUBPART K: PROCESS EMISSION SOURCES

Section	
217.301	Industrial Processes

SUBPART O: CHEMICAL MANUFACTURE

Section	
217.381	Nitric Acid Manufacturing Processes

SUBPART Q: STATIONARY RECIPROCATING INTERNAL COMBUSTION
ENGINES AND TURBINES

<u>Section</u>	
<u>217.386</u>	<u>Applicability</u>
<u>217.388</u>	<u>Control and Maintenance Requirements</u>
<u>217.390</u>	<u>Emissions Averaging Plans</u>
<u>217.392</u>	<u>Compliance</u>
<u>217.394</u>	<u>Testing and Monitoring</u>
<u>217.396</u>	<u>Recordkeeping and Reporting</u>

SUBPART T: CEMENT KILNS

Section	
217.400	Applicability
217.402	Control Requirements
217.404	Testing
217.406	Monitoring
217.408	Reporting
217.410	Recordkeeping

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

Section	
217.450	Purpose
217.452	Severability
217.454	Applicability
217.456	Compliance Requirements
217.458	Permitting Requirements
217.460	Subpart U NO _x Trading Budget
217.462	Methodology for Obtaining NO _x Allocations
217.464	Methodology for Determining NO _x Allowances from the New Source Set-Aside
217.466	NO _x Allocations Procedure for Subpart U Budget Units
217.468	New Source Set-Asides for “New” Budget Units
217.470	Early Reduction Credits (ERCs) for Budget Units
217.472	Low-Emitter Requirements
217.474	Opt-In Units
217.476	Opt-In Process
217.478	Opt-In Budget Units: Withdrawal from NO _x Trading Program
217.480	Opt-In Units: Change in Regulatory Status
217.482	Allowance Allocations to Opt-In Budget Units

SUBPART V: ELECTRIC POWER GENERATION

Section	
217.521	Lake of Egypt Power Plant

217.700	Purpose
217.702	Severability
217.704	Applicability
217.706	Emission Limitations
217.708	NO _x Averaging
217.710	Monitoring
217.712	Reporting and Recordkeeping

SUBPART W: NO_x TRADING PROGRAM FOR ELECTRICAL GENERATING UNITS

Section	
217.750	Purpose
217.752	Severability
217.754	Applicability
217.756	Compliance Requirements
217.758	Permitting Requirements
217.760	NO _x Trading Budget
217.762	Methodology for Calculating NO _x Allocations for Budget Electrical Generating Units (EGUs)
217.764	NO _x Allocations for Budget EGUs
217.768	New Source Set-Asides for “New” Budget EGUs
217.770	Early Reduction Credits for Budget EGUs
217.774	Opt-In Units
217.776	Opt-In Process
217.778	Budget Opt-In Units: Withdrawal from NO _x Trading Program
217.780	Opt-In Units: Change in Regulatory Status
217.782	Allowance Allocations to Budget Opt-In Units

SUBPART X: VOLUNTARY NO_x EMISSIONS REDUCTION PROGRAM

Section	
217.800	Purpose
217.805	Emission Unit Eligibility
217.810	Participation Requirements
217.815	NO _x Emission Reductions and the Subpart X NO _x Trading Budget
217.820	Baseline Emissions Determination
217.825	Calculation of Creditable NO _x Emission Reductions
217.830	Limitations on NO _x Emission Reductions
217.835	NO _x Emission Reduction Proposal
217.840	Agency Action
217.845	Emissions Determination Methods
217.850	Emissions Monitoring
217.855	Reporting
217.860	Recordkeeping
217.865	Enforcement

Appendix A	Rule into Section Table
Appendix B	Section into Rule Table
Appendix C	Compliance Dates
Appendix D	Non-Electrical Generating Units
Appendix E	Large Non-Electrical Generating Units
Appendix F	Allowances for Electrical Generating Units
Appendix G	<u>Existing Reciprocating Internal Combustion Engines Affected by the NO_x SIP Call</u>

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

Source: 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. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 217.101 Measurement Methods

Measurement of nitrogen oxides must be according to:

- a) The phenol disulfonic acid ~~procedures~~method, 40 CFR 60, Appendix A, Method 7, as incorporated by reference in Section 217.104(1999);
- b) Continuous emissions monitoring pursuant to 40 CFR 75, as incorporated by reference in Section 217.104(1999); and
- c) Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure), 40 CFR 60, Appendix A, Method 7E, as incorporated by reference in Section 217.104;(1999).
- d) Monitoring with portable monitors pursuant to ASTM D6522-00, as incorporated by reference in Section 217.104; and
- e) How do I conduct the initial and subsequent performance tests (for turbines), regarding NO_x pursuant to 40 CFR 60.4400, as incorporated by reference in Section 217.104.

(Source: Amended at 31 Ill. Reg. _____, effective _____)

Section 217.102 Abbreviations and Units

a) The following abbreviations are used in this Part:

ASTM	American Society for Testing and Materials
<u>Bbtu</u>	British thermal unit (60°F)
<u>bhp</u>	brake horsepower
<u>CEMS</u>	continuous emissions monitoring system
EGU	Electrical Generating Unit
<u>dscf</u>	dry standard cubic feet
<u>g/bhp-hr</u>	grams per brake horsepower-hour
kg	kilogram
kg/MW-hr	kilograms per megawatt-hour; usually used as an hourly emission rate
lb	pound
NO_x	Nitrogen Oxides
lbs/mmBbtu	pounds per million btu; usually used as an hourly emission rate
Mg	megagram or metric tonne
<u>mm</u>	million
<u>mmBbtu</u>	million British thermal units
<u>mmBbtu/hr</u>	million British thermal units per hour
MWe	megawatt of electricity
MW	megawatt; one million watts
MW-hr	megawatt-hour
<u>NATS</u>	<u>NO_x Allowance Tracking System</u>
<u>NO₂</u>	<u>nitrogen dioxide</u>
NO_x	nitrogen oxides
<u>O₂</u>	<u>oxygen</u>
<u>psia</u>	<u>pounds per square inch absolute</u>
peoc	potential electrical output capacity
	PTE potential to emit
ppm	parts per million
ppmv	parts per million by volume
T	English ton
<u>TPY</u>	<u>tons per year</u>

b) The following conversion factors have been used in this Part:

English	Metric
2.205 lb	1 kg
1 T	0.907 Mg
1 lb/T	0.500 kg/Mg
Mmbtu/hr	0.293 MW
1 lb/mmBbtu	1.548 kg/MW-hr
<u>1 mmBtu/hr</u>	<u>0.293 MW</u>
<u>1 mmBtu/hr</u>	<u>393 bhp</u>

(Source: Amended at 31 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~~method, as published in 40 CFR 60, Appendix A, Method 7 ~~(2000)~~(1999);
- 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)~~(1999);
- e) Alternative Control Techniques Document---- NO_x Emissions from Cement Manufacturing, EPA-453/R-94-004, U. S. Environmental Protection Agency-Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, March 1994;
- f) Section 11.6, Portland Cement Manufacturing, AP-42 Compilation of Air Emission Factors, Volume 1: Stationary Point and Area Sources, U.S. Environmental Protection Agency-Office of Air Quality Planning and Standards, Research Triangle Park, N. C. 27711, revised January 1995;
- g) 40 CFR § 60.13 ~~(2001)~~(1999); ~~and~~
- h) 40 CFR 60, Appendix A, Methods ~~3A, 7, 7A, 7C, 7D, and 7E, 19, and 20~~ ~~(2000)~~(1999);
- 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);
- k) Standards of Performance for Stationary Combustion Turbines, 40 CFR 60, Subpart KKKK, 60.4400 (2006); and
- l) Compilation of Air Pollutant Emission Factors: AP-42, Volume I: Stationary Point and Area Sources (2000), USEPA.

(Source: Amended at 31 Ill. Reg. _____, effective _____)

SUBPART Q: STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES
AND TURBINES

Section 217.386 Applicability

- a) A stationary reciprocating internal combustion engine or turbine that meets the criteria in subsection (a)(1) or (a)(2) of this Section is an affected unit and is subject to the requirements of this Subpart Q.
- 1) The engine at nameplate capacity is rated at equal to or greater than 500 bhp output; or
 - 2) The turbine is rated at equal to or greater than 3.5 MW (4,694 bhp) output at 14.7 psia, 59°F, and 60 percent relative humidity.
- b) Notwithstanding subsection (a) of this Section, an engine or turbine will not be an affected unit and is not subject to the requirements of this Subpart Q, if the engine or turbine is or has:
- 1) Used as an emergency or standby unit as defined by 35 Ill. Adm. Code 211.1920;
 - 2) Used for research or for the purposes of performance verification or testing;
 - 3) Used to control emissions from landfills, where at least 50 percent of the heat input is gas collected from a landfill;
 - 4) Used for agricultural purposes including the raising of crops or livestock that are produced on site, but not associated businesses like packing operations, sale of equipment or repair;
 - 5) A nameplate capacity rated at less than 1500 bhp (1118 kW) output, mounted on a chassis or skids, designed to be moveable, and moved to a different source at least once every 12 months; or
 - 6) Regulated under Subpart W or a subsequent federal NO_x Trading program for electrical generating units.
- c) If an exempt unit ceases to fulfill the criteria specified in subsection (b) of this Section, the owner or operator must notify the Agency in writing within 30 days after becoming aware that the exemption no longer applies and comply with the control requirements of this Subpart Q.
- d) The requirements of this Subpart Q will continue to apply to any engine or turbine

that has ever been subject to the control requirements of Section 217.388, even if the affected unit ceases to fulfill the rating requirements of subsection (a) of this Section or becomes eligible for an exemption pursuant to subsection (b) of this Section.

(Source: Added at 31 Ill. Reg. _____, effective _____.)

Section 217.388 Control and Maintenance Requirements

On and after the applicable compliance date in Section 217.392, an owner or operator of an affected unit must inspect and maintain affected units as required by subsection (d) of this Section and comply with either the applicable emissions concentration as set forth in subsection (a) of this Section, or the requirements for an emissions averaging plan as specified in subsection (b) of this Section or the requirements for operation as a low usage unit as specified in subsection (c) of this Section.

- a) The owner or operator must limit the discharge from an affected unit into the atmosphere of any gases that contain NO_x to no more than:
 - 1) 150 ppmv (corrected to 15 percent O₂ on a dry basis) for spark-ignited rich-burn engines;
 - 2) 210 ppmv (corrected to 15 percent O₂ on a dry basis) for spark-ignited lean-burn engines, except for existing spark-ignited Worthington engines that are not listed in Appendix G;
 - 3) 365 ppmv (corrected to 15 percent O₂ on a dry basis) for existing spark-ignited Worthington engines that are not listed in Appendix G;
 - 4) 660 ppmv (corrected to 15 percent O₂ on a dry basis) for diesel engines;
 - 5) 42 ppmv (corrected to 15 percent O₂ on a dry basis) for gaseous fuel-fired turbines; and
 - 6) 96 ppmv (corrected to 15 percent O₂ on a dry basis) for liquid fuel-fired turbines.
- b) The owner or operator must comply with the requirements of the applicable emissions averaging plan as set forth in Section 217.390.
- c) The owner or operator must operate the affected unit as a low usage unit pursuant to subsection (c)(1) or (c)(2) of this Section. Low usage units are not subject to the requirements of this Subpart Q except for the requirements to inspect and maintain the unit pursuant to subsection (d) of this Section, and retain records pursuant to Sections 217.396(b) and (c). Only one of the following exemptions

may be utilized at a particular source:

- 1) The potential to emit (PTE) is no more than 100 TPY NO_x aggregated from all engines and turbines located at the source that are not otherwise exempt pursuant to Section 217.386(b), and not complying with the requirements of subsection (a) or (b) of this Section and the NO_x PTE limit is contained in a federally enforceable permit; or
- 2) The aggregate bhp-hr/MW-hr from all affected units located at the source that are not exempt pursuant to Section 217.386(b), and not complying with the requirements of subsection (a) or (b) of this Section, are less than or equal to the bhp-hrs and MW-hrs operation limit listed in subsection (c)(2)(A) and (c)(2)(B) of this Section. For units not located at a natural gas transmission compressor station or storage facility that drive a natural gas compressor station, the operation limits of subsections (c)(2)(A) and (B) of this Section must be contained in a federally enforceable permit.
 - A) 8 mm bhp-hrs or less on an annual basis for engines; and
 - B) 20,000 MW-hrs or less on an annual basis for turbines.
- d) The owner or operator must inspect and perform periodic maintenance on the affected unit, in accordance with a Maintenance Plan that documents:
 - 1) For a unit not located at natural gas transmission compressor station or storage facility either:
 - A) The manufacturer's recommended inspection and maintenance of the applicable air pollution control equipment, monitoring device, and affected unit; or
 - B) If the original equipment manual is not available or substantial modifications have been made that require an alternative procedure for the applicable air pollution control device, monitoring device, or affected unit, the owner or operator must establish a plan for inspection and maintenance in accordance with what is customary for the type of air pollution control equipment, monitoring device, and affected unit.
 - 2) For a unit located at a natural gas compressor station or storage facility, the operator's maintenance procedures for the applicable air pollution control device, monitoring device, and affected unit.

(Source: Added at 31 Ill. Reg. _____, effective _____.)

Section 217.390 Emissions Averaging Plans

- a) An owner or operator of certain affected units may comply through an emissions averaging plan.
 - 1) The unit or units that commenced operation before January 1, 2002, may be included in an emissions averaging plan as follows:
 - A) Units located at a single source or at multiple sources in Illinois, so long as the units are owned by the same company or parent company where the parent company has working control through stock ownership of its subsidiary corporations. A unit may be listed in only one emissions averaging plan;
 - B) Units that have a compliance date later than the control period for which the averaging plan is being used for compliance; and
 - C) Units which the owner or operator may claim as exempt pursuant to Section 217.386(b) 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 emission concentration limits, testing, monitoring, recordkeeping and reporting requirements.
 - 2) The following types of units may not be included in an emissions averaging plan:
 - A) Units that commence operation after January 1, 2002, unless the unit replaces an engine or turbine that commenced operation on or before January 1, 2002, or it replaces an engine or turbine that replaced a unit that commenced operation on or before January 1, 2002. The new unit must be used for the same purpose as the replacement unit. The owner or operator of a unit that is shutdown and replaced must comply with the provisions of Section 217.396(d)(3) before the replacement unit may be included in an emissions averaging plan.
 - B) Units which the owner or operator is claiming are exempt pursuant to Section 217.386(b) or as a low usage unit pursuant to Section 217.388(c).
- b) An owner or operator must submit an emissions averaging plan to the Agency by the applicable compliance date set forth in Section 217.392. The plan must include, but is not limited to:
 - 1) The list of affected units included in the plan by unit identification number

and permit number.

- 2) A sample calculation demonstrating compliance using the methodology provided in subsection (f) of this Section for both the ozone season and calendar year.
- c) An owner or operator may amend an emissions averaging plan only once per calendar year. An amended plan must be submitted to the Agency by May 1 of the applicable calendar year. If an amended plan is not received by the Agency by May 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, an owner or operator, and the buyer, if applicable:
- 1) Must submit an updated emissions averaging plan or plans to the Agency within 60 days, if a unit that is listed in an emissions averaging plan is sold or taken out of service.
 - 2) May amend its emissions averaging plan to include another unit within 30 days of discovering that the unit no longer qualifies as an exempt unit pursuant to Section 217.386(b) or as a low usage unit pursuant to Section 217.388(c).
- e) An owner or operator must:
- 1) Demonstrate compliance for both 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 higher of the monitoring or test data determined pursuant to Section 217.394; and the actual hours of operation for the applicable control period;
 - 2) Notify the Agency by October 31 following the ozone season, if compliance cannot be demonstrated for that ozone season; and
 - 3) Submit to the Agency by January 31 following each calendar year, a compliance report containing the information required by Section 217.396(d)(4).
- 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 emissions for those units for both the ozone season and calendar year. The following equation must be used to determine compliance:
-

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

Where:

$$\underline{N_{act}} = \underline{\sum_{i=1}^n EM_{act(i)}}$$

$$\underline{N_{all}} = \underline{\sum_{i=1}^n EM_{all(i)}}$$

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

$\underline{N_{all}}$ = Total sum of the allowable NO_x mass emissions from units included in the averaging plan for each fuel used (lbs per ozone season and calendar year).

$\underline{EM_{all(i)}}$ = Total mass of allowable NO_x emissions in lbs for a unit as determined in subsection (g)(2), (g)(3), (g)(4), (g)(5), or (g)(6) of this Section.

$\underline{EM_{act(i)}}$ = Total mass of actual NO_x emissions in lbs for a unit as determined in subsection (g)(1), (g)(3), (g)(5) or (h) of this Section.

\underline{i} = Subscript denoting an individual unit and fuel used.

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

g) For each unit in the averaging plan, and each fuel used by a unit, determine actual and allowable NO_x emissions using the following equations, except as provided for in subsection (h) of this Section:

1) Actual emissions must be determined as follows:

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

$$E_{act(i)} = \underline{\frac{\sum_{j=1}^m C_{d(act(j))} \times F_d \times \left(\frac{20.9}{20.9 - \%O_{2d(j)}} \right)}{m}}$$

2) Allowable emissions must be determined as follows:

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

$$E_{all(i)} = \underline{\frac{\sum_{j=1}^m C_{d(all)} \times F_d \times \left(\frac{20.9}{20.9 - \%O_{2d(j)}} \right)}{m}}$$

Where:

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

$EM_{all(i)}$	=	<u>Total mass of allowable NO_x emissions in lbs for a unit.</u>
E_{act}	=	<u>Actual NO_x emission rate (lbs/mmBtu) calculated according to the above equation.</u>
E_{all}	=	<u>Allowable NO_x emission rate (lbs/mmBtu) calculated according to the above equation.</u>
H	=	<u>Heat input (mmBtu/ozone season or mmBtu/year) calculated from fuel flow meter and the heating value of the fuel used.</u>
$C_{d(act)}$	=	<u>Actual concentration of NO_x in lb/dscf (ppmv x 1.194 x 10⁻⁷) on a dry basis for the fuel used. Actual concentration is determined on each of the most recent test run or monitoring pass performed pursuant to Section 217.394, whichever is higher.</u>
$C_{d(all)}$	=	<u>Allowable concentration of NO_x in lb/dscf (allowable emission limit in ppmv specified in Section 217.388(a), except as provided for in subsection (g)(6) of this Section, if applicable. multiplied by 1.194 x 10⁻⁷) on a dry basis for the fuel used.</u>
F_d	=	<u>The ratio of the gas volume of the products of combustion to the heat content of the fuel (dscf/mmBtu) as given in the table of F Factors included in 40 CFR 60, Appendix A, Method 19 or as determined using 40 CFR 60, Appendix A, Method 19.</u>
%O _{2d}	=	<u>Concentration of oxygen in effluent gas stream measured on a dry basis during each of the applicable test or monitoring runs used for determining emissions, as represented by a whole number percent, e.g., for 18.7%O_{2d}, 18.7 would be used.</u>
i	=	<u>Subscript denoting an individual unit and the fuel used.</u>
j	=	<u>Subscript denoting each test run or monitoring pass for an affected unit for a given fuel.</u>
m	=	<u>The number of test runs or monitoring passes for an affected unit using a given fuel.</u>

- 3) For a replacement unit that is electric-powered, the allowable NO_x emissions from the affected unit that was replaced should be used in the averaging calculations and the actual NO_x emissions for the electric-powered replacement unit ($EM_{(i)act\ elec}$) are zero. Allowable NO_x emissions for the electric-powered replacement are calculated using the actual total bhp-hrs generated by the electric-powered replacement unit on an ozone season and on an annual basis multiplied by the allowable NO_x emission rate in lb/bhp-hr of the replaced unit.

The allowable mass of NO_x emissions from an electric-powered replacement unit ($EM_{(i)all\ elec}$) must be determined by multiplying the

nameplate capacity of the unit by the hours operated during the ozone season or annually and the allowable NO_x emission rate of the replaced unit (E_{all rep}) in lb/mmBtu converted to lb/bhp-hr. For this calculation the following equation should be used:

$$EM_{\text{all elec}(i)} = \text{bhp} \times \text{OP} \times F \times E_{\text{all rep}(i)}$$

Where:

E_{all elec}(i) = Mass of allowable NO_x emissions from the electric-powered replacement unit in pounds per ozone season or calendar year.

bhp = Nameplate capacity of the electric-powered replacement unit in brake-horsepower.

OP = Operating hours during the ozone season or calendar year.

F = Conversion factor of 0.0077 mmBtu/bhp-hr.

E_{all rep}(i) = Allowable NO_x emission rate (lbs/mmBtu) of the replaced unit.

i = Subscript denoting an individual electric unit and the fuel used.

- 4) For a replacement unit that is not electric, the allowable NO_x emissions rate used in the above equations set forth in subsection (g)(2) of this Section must be either:
- A) Prior to the applicable compliance date for the replaced unit pursuant to Section 217.392, the higher of the actual NO_x emissions as determined by testing or monitoring data or the applicable uncontrolled NO_x emissions factor from Compilation of Air pollutant emission Factors: AP-42, Volume I: Stationary Point and Area Sources, as incorporated by reference in Section 217.104 for the unit that was replaced; or
 - B) On and after the applicable compliance date for the replaced unit pursuant to Section 217.392, the applicable emissions concentration for the type of unit that replaced pursuant to Section 217.388(a).
- 5) For a unit that is replaced with purchased power, the allowable NO_x emissions rate used in the above equations set forth in subsection (g)(2) of this Section must be the emissions concentration as set forth in Section 217.388(a) or subsection (g)(6) of this Section, when applicable, for the type of unit that was replaced. For owners or operators replacing units with purchased power, the annual hours of operations that must be used are the calendar year hours of operation for the unit that was shutdown averaged over the three-year period prior to the shutdown. The actual

NO_x emissions for the units replaced by purchased power (EM_{(i)act}) are zero. These units may be included in any emissions averaging plan for no more than five years beginning with the calendar year that the replaced unit is shut down.

6) For units that have a later compliance date, allowable emissions rate used in the above equations set forth in subsection (g)(2) of this Section must be:

A) Prior to the applicable compliance date pursuant to Section 217.392, the higher of the actual NO_x emissions as determined by testing or monitoring data, or the applicable uncontrolled NO_x emissions factor from Compilation of Air Pollutant Emission Factors: AP-42, Volume I: Stationary Point and Areas Sources, as incorporated by reference in Section 217.104; and

B) On and after the units applicable compliance date pursuant to Section 217.392, the applicable emissions concentration for that type of unit pursuant to Section 217.388(a).

h) For units that use CEMS the data must show that the total mass of actual NO_x emissions determined pursuant to subsection (h)(1) of this Section is less than or equal to the allowable NO_x emissions calculated in accordance with the equations in subsections (f) and (h)(2) of this Section for both the ozone season and calendar year. The equations in subsection (g) of this Section will not apply.

1) The total mass of actual NO_x emissions in lbs for a unit (EM_{act}) must be the sum of the total mass of actual NO_x emissions from each affected unit using CEMS data collected in accordance with 40 CFR 60 or 75, or alternate methodology that has been approved by the Agency or USEPA and included in a federally enforceable permit.

2) The allowable NO_x emissions must be determined as follows:

$$\underline{EM_{(all)} = \sum_{i=1}^m (Cd_i * flowstack_i * 1.194 \times 10^{-7})}$$

Where:

EM_{all(i)} = Total mass of allowable NO_x emissions in lbs for a unit.

Flow_i = Stack flow (dscf/hr) for a given stack.

Cd_i = Allowable concentration of NO_x (ppmv) specified in Section 217.388(a) of this subpart for a given stack. (1.194 x 10⁻⁷) converts to lb/dscf).

j = subscript denoting each hour operation of a given unit.

m = Total number of hours of operation of a unit.

i = Subscript denoting an individual unit and the fuel used.

(Source: Added at 31 Ill. Reg. _____, effective _____.)

Section 217.392 Compliance

- a) An owner or operator of an affected unit may not operate that unit unless it meets the applicable concentration limit in Section 217.388(a), or is included in an emissions averaging plan pursuant to Section 217.388(b), or meets the low usage requirements pursuant to Section 217.388(c), and complies with all other applicable requirements of this Subpart Q by the earliest applicable date listed below:
- 1) On and after May 1, 2007, an owner or operator of an affected engine listed in Appendix G may not operate the affected engine unless the requirements of this Subpart Q are met or the affected engine is exempt pursuant to Section 217.386(b);
 - 2) On and after January 1, 2009, an owner or operator of an affected unit and that is located in Cook, DuPage, Aux Sable Township and Goose Lake Township in Grundy, Kane, Oswego Township in Kendall, Lake, McHenry, Will, Jersey, Madison, Monroe, Randolph Township in Randolph, or St. Clair County, and is not listed in Appendix G may not operate the affected unit unless the requirements of this Subpart Q are met or the affected unit is exempt pursuant to Section 217.386(b);
 - 3) On and after January 1, 2011, an owner or operator of an affected engine with a nameplate capacity rated at 1500 bhp or more, and affected turbines rated at 5 MW (6,702 bhp) or more that is not subject to subsection (a)(1) or (a)(2) of this Section, may not operate the affected unit unless the requirements of this Subpart Q are met or the affected unit is exempt pursuant to Section 217.386(b); or
 - 4) On and after January 1, 2012, an owner or operator of an affected engine with a nameplate capacity rated at less than 1500 bhp or an affected turbine rated at less than 5 MW (6,702 bhp) that is not subject to subsection (a)(1), (a)(2) or (a)(3) of this Section, may not operate the affected engine or turbine unless the requirements of this Subpart Q are met or the affected unit is exempt pursuant to Section 217.386(b).
- b) Owners and operators of an affected unit may use NO_x allowances to meet the compliance requirements in Section 217.388 as specified below. A NO_x allowance is defined as an allowance used to meet the requirements of a NO_x trading program administered by USEPA where one allowance is equal to one ton of NO_x emissions.

- 1) NO_x allowances may only be used under the following circumstances:
 - A) An anomalous or unforeseen operating scenario inconsistent with historical operations for a particular ozone season or calendar year that causes an emissions exceedance.
 - B) To achieve compliance no more than twice in any rolling five-year period.
 - C) For a unit that is not listed in Appendix G.
- 2) The owner or operator of the affected unit must surrender to the Agency one NO_x allowance for each ton or portion of a ton of NO_x by which actual emissions exceed allowed emissions. For noncompliance with a seasonal limit, a NO_x ozone season allowance must be used. For noncompliance with the emissions concentration limits in Section 217.388(a) or an annual limitation in an emissions averaging plan, only a NO_x annual allowance may be used.
- 3) The owner or operator must submit a report documenting the circumstances that required the use of NO_x allowances and identify what actions will be taken in subsequent years to address these circumstances and must transfer the NO_x allowances to the Agency's federal NO_x retirement account. The report and the transfer of allowances must be submitted by October 31 for exceedances during the ozone season and March 1 for exceedances of the emissions concentration or the annual emission averaging plan limits. The report must contain the NATS serial numbers of the NO_x allowances.

(Source: Added at 31 Ill. Reg. _____, effective _____.)

Section 217.394 Testing and Monitoring

- a) An owner or operator of an engine or turbine must conduct an initial performance test pursuant to subsection (c)(1) or (c)(2) of this Section as follows:
 - 1) By May 1, 2007, for affected engines listed in Appendix G. Performance tests must be conducted on units listed in Appendix G, even if the unit is included in an emissions averaging plan pursuant to Section 217.388(b).
 - 2) By the applicable compliance date as set forth in Section 217.392, or within the first 876 hours of operation per calendar year, whichever is later:

- A) For affected units not listed in Appendix G that operate more than 876 hours per calendar year; and
 - B) For units that are not affected units that are included in an emissions averaging plan and operate more than 876 hours per calendar year.
- 3) Once within the five-year period after the applicable compliance date as set forth in Section 217.392:
- A) For affected units that operate fewer than 876 hours per calendar year; and
 - B) For units that are not affected units that are included in an emissions averaging plan and that operate fewer than 876 hours per calendar year
- b) An owner or operator of an engine or turbine must conduct subsequent performance tests pursuant to subsection (c)(1) or (c)(2) of this Section as follows:
- 1) For affected engines listed in Appendix G and all units included in an emissions averaging plan, once every five years. Testing must be performed in the calendar year by May 1 or within 60 days of starting operation, whichever is later;
 - 2) If the monitored data shows that the unit is not in compliance with the applicable emissions concentration or emissions averaging plan, the owner or operator must report the deviation to the Agency in writing within 30 days and conduct a performance test pursuant to subsection (c) of this Section within 90 days of the determination of noncompliance; and
 - 3) When in the opinion of the Agency or USEPA, it is necessary to conduct testing to demonstrate compliance with Section 217.388, the owner or operator of a unit must, at his or her own expense, conduct the test in accordance with the applicable test methods and procedures specified in this Section 217.394 within 90 days of receipt of a notice to test from the Agency or USEPA.
- c) Testing Procedures:
- 1) For an engine: The owner or operator must conduct a performance test using Method 7 or 7E of 40 CFR 60, Appendix A, as incorporated by reference in Section 217.104. Each compliance test must consist of three separate runs, each lasting a minimum of 60 minutes. NO_x emissions must be measured while the affected unit is operating at peak load. If the unit

combusts more than one type of fuel (gaseous or liquid) including backup fuels, a separate performance test is required for each fuel.

- 2) For a turbine: The owner operator must conduct a performance test using the applicable procedures and methods in 40 CFR 60.4400, as incorporated by reference in Section 217.104.
- d) Monitoring: Except for those years in which a performance test is conducted pursuant to subsection (a) or (b) of this Section, the owner or operator of an affected unit or a unit included in an emissions averaging plan must monitor NO_x concentrations annually, once between January 1 and May 1 or within the first 876 hours of operation per calendar year, whichever is later. If annual operation is less than 876 hours per calendar year, each affected unit must be monitored at least once every five years. Monitoring must be performed as follows:
- 1) A portable NO_x monitor and utilizing method ASTM D6522-00, as incorporated by reference in Section 217.104, or a method approved by the Agency must be used. If the engine or turbine combusts both liquid or gaseous fuels as primary or backup fuels, separate monitoring is required for each fuel.
- 2) NO_x and O₂ concentrations measurements must be taken three times for a duration of at least 20 minutes. Monitoring must be done at highest achievable load. The concentrations from the three monitoring runs must be averaged to determine whether the affected unit is in compliance with the applicable emissions concentration or emissions averaging plan as specified in Section 217.388.
- e) Instead of complying with the requirements of subsections (a), (b), (c) and (d) of this Section, an owner or operator may install and operate a CEMS on an affected unit that meets the applicable requirements of 40 CFR 60, subpart A, and Appendix B, incorporated by reference in Section 217.104, and complies with the quality assurance procedures specified in 40 CFR 60, Appendix F, or 40 CFR 75 as incorporated by reference in Section 217.104, or an alternate procedure as approved by the Agency or USEPA in a federally enforceable permit. The CEMS must be used to demonstrate compliance with the applicable emissions concentration or emissions averaging plan only on an ozone season and annual basis.

(Source: Added at 31 Ill. Reg. _____, effective _____.)

Section 217.396 Recordkeeping and Reporting

- a) Recordkeeping. The owner or operator of a unit included in an emissions averaging plan or an affected unit that is not exempt pursuant to Section

217.386(b) and is not subject to the low usage exemption of Section 217.388(c) must maintain records that demonstrate compliance with the requirements of this Subpart Q which include, but are not limited to:

- 1) Identification, type (e.g., lean-burn, gas-fired), and location of each unit.
 - 2) Calendar date of the record.
 - 3) The number of hours the unit operated on a monthly basis, and during each ozone season.
 - 4) Type and quantity of the fuel used on a daily basis.
 - 5) The results of all monitoring performed on the unit and reported deviations.
 - 6) The results of all tests performed on the unit.
 - 7) The plan for performing inspection and maintenance of the units, air pollution control equipment, and the applicable monitoring device pursuant to Section 217.388(d).
 - 8) A log of inspections and maintenance performed on the unit's air emissions, monitoring device, and air pollution control device. These records must include, at a minimum, date, load levels and any manual adjustments along with the reason for the adjustment (e.g., air to fuel ratio, timing or other settings).
 - 9) If complying with the emissions averaging plan provisions of Sections 217.388(b) and 217.390 copies of the calculations used to demonstrate compliance with the ozone season and annual control period limits, noncompliance reports for the ozone season, and ozone and annual control period compliance reports submitted to the Agency.
 - 10) Identification of time periods for which operating conditions and pollutant data were not obtained by either the CEMS or alternate monitoring procedures including the reasons for not obtaining sufficient data and a description of corrective actions taken.
 - 11) Any NO_x allowance reconciliation reports submitted pursuant to Section 217.392(e).
- b) The owner or operator of an affected unit that is complying with the low usage provisions of Section 217.388(c), must:
- 1) For each unit complying with Section 217.388(c)(1), maintain a record of

the NO_x emissions for each calendar year; or

- 2) For each unit complying with Section 217.388(c)(2), maintain a record of bhp or MW hours operated each calendar year.
- c) The owner or operator of an affected unit or unit included in an emissions averaging plan must maintain the records required by subsections (a) and (b) of this Section for a period of five-years at the source at which the unit is located. The records must be made available to the Agency and USEPA upon request.
- d) Reporting requirements:
 - 1) The owner or operator must notify the Agency in writing 30 days and five days prior to testing pursuant to Section 217.394(a) and:
 - A) 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 performance test as scheduled, the owner or operator of the unit must notify the Agency as soon as possible of the delay in the original test date, either by providing at least seven days prior notice of the rescheduled date of the performance test, or by arranging a new test date with the Agency by mutual agreement;
 - B) Provide a testing protocol to the Agency 60 days prior to testing; and
 - C) Not later than 30 days after the completion of the test, submit the results of the test to the Agency.
 - 2) Pursuant to the requirements for monitoring in Section 217.394(d), the owner or operator of the unit must report to the Agency any monitored exceedances of the applicable NO_x concentration from Section 217.388(a) or (b) within 30 days of performing the monitoring.
 - 3) Within 90 days of permanently shutting down an affected unit or a unit included in an emissions averaging plan, the owner or operator of the unit must withdraw or amend the applicable permit to reflect that the unit is no longer in service.
 - 4) If demonstrating compliance through an emissions averaging plan:
 - A) By October 31 following the applicable ozone season, the owner or operator must notify the Agency if he or she cannot demonstrate compliance for that ozone season; and

- B) By January 30 following the applicable calendar year, the owner or operator must submit to the Agency a report that demonstrates the following:
- i) For all units that are part of the emissions averaging plan, the total mass of allowable NO_x emissions for the ozone season and for the annual control period;
 - ii) The total mass of actual NO_x emissions for the ozone season and annual control period for each unit included in the averaging plan;
 - iii) The calculations that demonstrate that the total mass of actual NO_x emissions are less than the total mass of allowable NO_x emissions using equations in Sections 217.390(f) and (g); and
 - iv) The information required to determine the total mass of actual NO_x emissions and the calculations performed in subsection (d)(4)(B)(iii) of this Section.
- 5) If operating a CEMS, the owner or operator must submit an excess emissions and monitoring systems performance report in accordance with the requirements of 40 CFR 60.7(c) and 60.13, or 40 CFR 75 incorporated by reference in Section 217.104, or an alternate procedure approved by the Agency or USEPA and included in a federally enforceable permit.
- 6) If using NO_x allowances to comply with the requirements of Section 217.388, reconciliation reports as required by Section 217.392(b)(3).

(Source: Added at 31 Ill. Reg. _____, effective _____.)

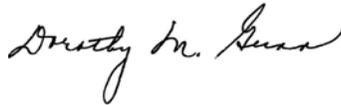
Appendix G: Existing Reciprocating Internal Combustion Engines Affected by NO_x SIP Call

<u>Plant ID</u>	<u>Point ID</u>	<u>Segment</u>
<u>ANR Pipeline Co. – Sandwich</u>		
<u>093802AAF</u>	<u>E-108</u>	<u>1</u>
<u>Natural Gas Pipeline Co. of America 8310</u>		
<u>027807AAC</u>	<u>730103540041</u>	<u>1</u>
<u>Natural Gas Pipeline Co. of America Sta 110</u>		
<u>073816AAA</u>	<u>851000140011</u>	<u>1</u>
<u>073816AAA</u>	<u>851000140012</u>	<u>2</u>
<u>073816AAA</u>	<u>851000140013</u>	<u>3</u>
<u>073816AAA</u>	<u>851000140014</u>	<u>4</u>
<u>073816AAA</u>	<u>851000140041</u>	<u>1</u>
<u>073816AAA</u>	<u>851000140051</u>	<u>1</u>
<u>Northern Illinois Gas Co. - Stor Stat 359</u>		
<u>113817AAA</u>	<u>730105440021</u>	<u>1</u>
<u>113817AAA</u>	<u>730105440031</u>	<u>1</u>
<u>113821AAA</u>	<u>730105430021</u>	<u>1</u>
<u>113821AAA</u>	<u>730105430051</u>	<u>1</u>
<u>Panhandle Eastern Pipe Line Co.-Glenarm</u>		
<u>167801AAA</u>	<u>87090038002</u>	<u>1</u>
<u>167801AAA</u>	<u>87090038004</u>	<u>1</u>
<u>167801AAA</u>	<u>87090038005</u>	<u>1</u>
<u>Panhandle Eastern Pipeline - Tuscola St</u>		
<u>041804AAC</u>	<u>73010573009</u>	<u>9</u>
<u>041804AAC</u>	<u>73010573010</u>	<u>10</u>
<u>041804AAC</u>	<u>73010573011</u>	<u>11</u>
<u>041804AAC</u>	<u>73010573012</u>	<u>12</u>
<u>041804AAC</u>	<u>73010573013</u>	<u>13</u>
<u>Panhandle Eastern Pipeline Co.</u>		
<u>149820AAB</u>	<u>7301057199G</u>	<u>3</u>
<u>149820AAB</u>	<u>7301057199I</u>	<u>1</u>
<u>149820AAB</u>	<u>7301057199J</u>	<u>1</u>

<u>149820AAB</u>	<u>7301057199K</u>	<u>1</u>
<u>Panhandle Eastern Pipeline Co.-Glenarm</u>		
<u>167801AAA</u>	<u>87090038001</u>	<u>1</u>
<u>Phoenix Chemical Co.</u>		
<u>085809AAA</u>	<u>730700330101</u>	<u>1</u>
<u>085809AAA</u>	<u>730700330102</u>	<u>2</u>
<u>085809AAA</u>	<u>730700330103</u>	<u>3</u>

(Source: Added at 31 Ill. Reg. _____, effective _____.)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on April 19, 2007, by a vote of 3-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board