ILLINOIS POLLUTION CONTROL BOARD September 4, 1997

IN THE MATTER OF:)
MAJOR STATIONARY SOURCES)
CONSTRUCTION AND)
MODIFICATION (NEW SOURCE)
REVIEW RULES): AMENDMENTS)
TO 35 ILL. ADM. CODE 203)

R98-10 (Rulemaking - Air)

Proposed Rule. First Notice.

OPINION AND ORDER OF THE BOARD (by K.M. Hennessey):

On September 2, 1997, the Illinois Environmental Protection Agency (Agency) filed this proposal for rulemaking to amend 35 Ill. Adm. Code 203, the New Source Review (NSR) rules. This rulemaking proposes to revise particular sections in 35 Ill. Adm. Code 203 so that the language more closely reflects the terminology used in Sections 182(c)(7) and (8) of the Clean Air Act. 42 U.S.C. § 7511(c)(7), (8) (1996). The proposal will affect existing sources in ozone nonattainment areas that are subject to the "special rules" for modifications found at Sections 182(c)(7) and (8) of the Clean Air Act, *i.e.*, existing sources making "major" modifications at sources in serious and severe ozone nonattainment areas. (This would, as a practical matter, currently affect only the Chicago ozone nonattainment area. See 35 Ill. Adm. Code 218.103.)

The Board had adopted the "special rules" as portions of Sections 203.206, 203.207, and 203.301 in its rulemaking entitled <u>In the Matter of: Amendments to New Source Review</u> <u>Rules, 35 Ill. Adm. Code 203</u> (April 22, 1993), R92-21. These rules were based on the Agency's understanding of the United States Environmental Protection Agency's (USEPA) preliminary guidance on Sections 182(c)(7) and (8) of the Clean Air Act. The current proposal amends our rules to be consistent with USEPA's more recent interpretation of the "special rules" in its 1996 NSR rule proposal. 61 Fed. Reg. 38249 (July 23, 1996). The proposed rules change the method of handling internal emission offsets, which may allow a source to "net-out" of NSR rule requirements or at least avoid imposition of some Best Available Control Technology and Lowest Achievable Emission Rate requirements. The Agency asserts that these proposed rules also will impact some calculations under the proposed Emissions Reduction Market System (ERMS). See <u>In the Matter of: Emissions Reduction</u> <u>Market System: 35 Ill. Adm. Code 205</u>, R97-13. The ERMS program is an element of Illinois' "Rate of Progress" plan required by Section 182(c)(2)(B) of the Clean Air Act.

This proposal was filed pursuant to Section 28.5 of the Environmental Protection Act (Act). 415 ILCS 5/28.5 (1996). Pursuant to that section, the Board is required to proceed within set timeframes toward the adoption of the regulation. The Board has no discretion to

adjust these timeframes under any circumstances. Today the Board sends this proposal to first notice under the Illinois Administrative Procedure Act (5 ILCS 100 (1996)) without commenting on the merits of the proposal. The following schedule indicates the deadlines by which the Board must act as provided in Section 28.5 of the Act (415 ILCS 5/28.5 (1996):

First Notice	on or before September 17, 1997
First Hearing	on or before October 27, 1997
Second Hearing	on or before November 26, 1997
Third Hearing	on or before December 10, 1997
Second Notice	
(if 3rd hearing is canceled)	on or before January 10, 1997
(if 3rd hearing is held)	on or before January 30, 1997
Final Adoption of Filing	21 days after receipt of JCAR
	certificate of no objection

The Board notes that the above dates are deadlines established by Section 28.5 of the Act (415 ILCS 5/28.5 (1996)) and do not represent actual hearing dates or filing dates. While the schedule includes a second and third hearing, these hearings may be canceled if unnecessary. The Board will proceed in this matter as Section 28.5 of the Act (415 ILCS 5/28.5 (1996)) requires and as discussed in the Board's resolutions regarding Section 28.5 of the Act. See RES 92-2 (October 28, 1992, and December 3, 1992).

ORDER

The Board directs the Clerk to cause publication of the proposed amendments in the *Illinois Register* for first notice:

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

PART 203 MAJOR STATIONARY SOURCES CONSTRUCTION AND MODIFICATION

SUBPART A: GENERAL PROVISIONS

Section	
203.101	

203 103	Actual	Construction
203.103	Actual	CONSULCTION

- 203.104 Actual Emissions
- 203.107 Allowable Emissions
- 203.110 Available Growth Margin

Definitions

203.112 Building, Structure and Facility

203.113	Commence
203.116	Construction
203.117	Dispersion Enhancement Techniques
203.119	Emission Baseline
203.121	Emission Offset
203.122	Emissions Unit
203.123	Federally Enforceable
203.124	Fugitive Emissions
203.125	Installation
203.126	Lowest Achievable Emission Rate
203.127	Nonattainment Area
203.128	Potential to Emit
203.131	Reasonable Further Progress
203.134	Secondary Emissions
203.136	Stationary Source
203.145	Volatile Organic Material (Repealed)
203.150	Public Participation
203.155	Severability (Repealed)

SUBPART B: MAJOR STATIONARY SOURCES IN NONATTAINMENT AREAS

Section

- 203.201 Prohibition
- 203.202 Coordination With Permit Requirement and Application Pursuant to 35 Ill. Adm. Code 201
- 203.203 Construction Permit Requirement and Application
- 203.204 Duration of Construction Permit (Repealed)
- 203.205 Effect of Permits
- 203.206 Major Stationary Source
- 203.207 Major Modification of a Source
- 203.208 Net Emission Determination
- 203.209 Significant Emissions Determination
- 203.210 Relaxation of a Source-Specific Limitation
- 203.211 Permit Exemption Based on Fugitive Emissions

SUBPART C: REQUIREMENTS FOR MAJOR STATIONARY SOURCES IN NONATTAINMENT AREAS

Section

- 203.301 Lowest Achievable Emission Rate
- 203.302 Maintenance of Reasonable Further Progress and Emission Offsets
- 203.303 Baseline and Emission Offsets Determination
- 203.304 Exemptions from Emissions Offset Requirement (Repealed)

203.305	Compliance by Existing Sources
203.306	Analysis of Alternatives

SUBPART F: OPERATION OF A MAJOR STATIONARY SOURCE OR MAJOR MODIFICATION

Section

- 203.601 Lowest Achievable Emission Rate Compliance Requirement
- 203.602 Emission Offset Maintenance Requirement

203.603 Ambient Monitoring Requirement (Repealed)

SUBPART G: GENERAL MAINTENANCE OF EMISSION OFFSETS

Section

203.701 General Maintenance of Emission Offsets

SUBPART H: OFFSETS FOR EMISSION INCREASES FROM ROCKET ENGINES AND MOTOR FIRING

Section 203.801 Offsetting by Alternative or Innovative Means

AUTHORITY: Implementing Section 9.1 and 10 and authorized by Section 27 and 28.5 of the Environmental Protection Act (Ill. Rev. Stat. 1991, ch. 111 1/2, pars. 1009.1, 1010 and 1027) [415 ILCS 5/9.1, 10 27 and 28.5].

SOURCE: Adopted and codified at 7 Ill. Reg. 9344, effective July 22, 1983; codified at 7 Ill. Reg. 13588; amended in R85-20 at 12 Ill. Reg. 6118, effective March 22, 1988; amended in R91-24 at 16 Ill. Reg. 13551, effective August 24, 1992; amended in R92-21 at 17 Ill. Reg. 6973, effective April 30, 1993; amended in R93-9 at 17 Ill. Reg. 16630, effective September 27, 1993; amended in R93-26 at 18 Ill. Reg. 6335, effective April 15, 1994; amended in R98-10 at , effective

SUBPART B: MAJOR STATIONARY SOURCES IN NONATTAINMENT AREAS

Section 203.206 Major Stationary Source

- a) For purposes of this Part, the term "major stationary source" shall exclusively mean "building, structure and facility," as those terms are defined in Section 203.113 of this Part.
- b) The following constitute a major stationary source:

- 1) For an area designated as nonattainment for ozone, a major stationary source is a stationary source which emits or has the potential to emit volatile organic material in an amount equal to or greater than the following:
 - A) 100 tons per year in an area classified as marginal or moderate nonattainment for ozone;
 - B) 50 tons per year in an area classified as serious nonattainment for ozone;
 - C) 25 tons per year in an area classified as severe nonattainment for ozone; and
 - D) 10 tons per year in an area classified as extreme nonattainment for ozone.
- 2) For an area designated as nonattainment for nitrogen dioxide, a major stationary source is a stationary source which emits or has the potential to emit 100 tons per year or more of nitrogen dioxide.
- 3) For an area designated as nonattainment for ozone, a major stationary source is a stationary source which emits or has the potential to emit nitrogen oxides in an amount equal to or greater than the following, unless United States Environmental Protection Agency (USEPA) has made a finding under Sections 110 and 182(f) of the Clean Air Act that controlling of emissions of nitrogen oxides from such source shall not be required:
 - A) 100 tons per year in an area classified as marginal or moderate nonattainment for ozone,
 - B) 50 tons per year in an area classified as serious nonattainment for ozone,
 - C) 25 tons per year in an area classified as severe nonattainment for ozone, and
 - D) 10 tons per year in an area classified as extreme nonattainment for ozone.
- 4) For an area designated nonattainment for PM-10, a major stationary source is a stationary source which emits or has the potential to emit:
 - A) 100 tons per year or more of PM-10 in an area classified as moderate nonattainment area, or
 - B) 70 tons per year or more of PM-10 in an area classified as serious nonattainment.
- 5) For an area designated nonattainment for carbon monoxide, a major stationary source is a stationary source which emits or has the potential to emit:
 - A) 100 tons per year or more of carbon monoxide in a nonattainment area, except as provided in (B) below,
 - B) 50 tons per year or more in an area classified as "serious" nonattainment for carbon monoxide where stationary sources significantly contribute to ambient carbon monoxide levels, as

determined under rules issued by USEPA, pursuant to the Clean Air Act.

- 6) For an area designated nonattainment for a pollutant other than ozone, nitrogen dioxide, PM-10 or carbon monoxide, a major stationary source is a stationary source which emits or has the potential to emit 100 tons per year or more of the pollutant.
- c) Any physical change that occurs at a stationary source which does not qualify under subsection (a) of this Section as a major stationary source will be considered a major stationary source, if the change would constitute a major stationary source by itself.
- d) The reconstruction of a major stationary source will be treated as the construction of a new major stationary source if the fixed capital cost of new components exceeds approximately half of the fixed capital cost of an entirely new stationary source. Determining whether reconstruction will occur is based on the following:
 - 1) Fixed capital cost shall mean the capital needed to provide all the depreciable components;
 - 2) The fixed capital cost for the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new source;
 - 3) The estimated life of the source after the replacements compared to the life of a comparable entirely new source; and
 - 4) The extent to which the components being replaced cause or contribute to the emissions from the source.
- e)d) For purposes of this Part, in areas that are classified as serious, severe, or extreme nonattainment, the fugitive emissions of a stationary source shall be included in determining whether it is a major stationary source. In areas that are not classified as serious, severe or extreme nonattainment, the fugitive emissions of a stationary source shall not be included in determining whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
 - 1) Coal cleaning plants (with thermal dryers);
 - 2) Kraft pulp mills;
 - 3) Portland cement plants;
 - 4) Primary zinc smelters;
 - 5) Iron and steel mills;
 - 6) Primary aluminum ore reduction plants;
 - 7) Primary copper smelters;
 - 8) Municipal incinerators capable of charging more than 250 tons of refuse per day;
 - 9) Hydrofluoric, sulfuric, or nitric acid plants;
 - 10) Petroleum refineries;
 - 11) Lime plants;
 - 12) Phosphate rock processing plants;
 - 13) Coke oven batteries;

- 14) Sulfer recovery plants;
- 15) Carbon black plants (furnace process);
- 16) Primary lead smelters;
- 17) Fuel conversion plants;
- 18) Sintering plants;
- 19) Secondary metal production plants;
- 20) Chemical process plants;
- 21) Fossil-fuel boilers (or combination thereof) totaling more than 250 million Btu per hour heat input;
- 22) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- 23) Taconite ore processing plants;
- 24) Glass fiber processing plants;
- 25) Charcoal production plants;
- 26) Fossil fuel-fired steam electric plants of more than 250 million Btu per hour heat input;
- 27) Any other stationary source categories regulated by a standard promulgated under Section 111 or 112 of the Clean Air Act (42 U.S.C. 7411, 7412), but only with respect to those air pollutants that have been regulated for that category;
- 28) Any other stationary source category designated by the USEPA by rule.

(Source: Amended at 17 Ill. Reg. 6973, effective April 30, 1993<u>; amended at</u>, effective)

Section 203.207 Major Modification of a Source

- a) Except as provided in subsection (c), (d) or (f) below, a physical change, or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant for which the area is designated a nonattainment area, shall constitute a major modification of a source.
- b) Any net emissions increase that is significant for volatile organic material or nitrogen oxides shall be considered significant for ozone.
- c) A physical change or change in the method of operation shall not include:
 - 1) Routine maintenance, <u>and repair</u>, and replacement which does not constitute reconstruction pursuant to Section 203.206(c).
 - 2) Use of an alternative fuel or raw material by reason of any order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (15 U.S.C. 791), the Power Plant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8301) (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act (16 U.S.C. 791, et seq.).
 - 3) Use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act (42 U.S.C. 7425).

- 4) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
- 5) Use of an alternative fuel or raw material by a stationary source which:
 - A) Was capable of accommodating such alternative fuel or raw material before December 21, 1976, and which has continuously remained capable of accommodating such fuels or materials unless such change would be prohibited under any enforceable permit condition established after December 21, 1976, pursuant to 40 CFR 52.21, this Part, or 35 Ill. Adm. Code 201.142 or 201.143, or
 - B) Is approved for use under any permit issued pursuant to this Part or 35 Ill. Adm. Code 201.142 or 201.143.
- 6) An increase in the hours of operation or in the production rate, unless such change is prohibited under any enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21, this Part, or 35 Ill. Adm. Code 201.142 or 201.143.
- 7) Any change in ownership at a stationary source.
- d) In areas classified as serious or severe nonattainment for ozone, beginning November 15, 1992, or such later date that an area is classified by the United States Environmental Protection Agency (USEPA) as a serious or severe nonattainment area for ozone, any physical change or change in the method of operation of a major stationary source which results in an increase in emissions of 25 tons per year or more of volatile organic material or nitrogen oxides from any discrete operation, unit, or other pollutant emitting activity at the source shall be considered a major modification unless: In an area classified as serious or severe nonattainment for ozone, increased emissions of volatile organic material or nitrogen oxides resulting from any physical change in, or change in the method of operation of, a stationary source located in the area shall be considered de minimis for purposes of this Part if the increase in net emissions of such air pollutant from such source does not exceed 25 tons when aggregated with all other net increases in emissions from the source over any period of five consecutive calendar years which includes the year in which such increase occurred.
- e) In the case of any major stationary source of volatile organic material or nitrogen oxides located in an area classified as serious or severe nonattainment for ozone (other than a source which emits or has the potential to emit 100 tons or more or volatile organic material or nitrogen oxides per year), whenever any change at that source results in any increase (other than a de minimis increase) in emissions of volatile organic material or nitrogen oxides, respectively, from any discrete operation, unit, or other pollutant emitting activity at the source, such increase shall be considered a major modification for purposes of this Part, except such increase shall not be considered a major modification for such purposes if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of volatile organic material or nitrogen oxides,

respectively, from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1.

- 1) The emissions and potential to emit emissions of such pollutant, i.e., volatile organic material or nitrogen oxides, are less than 100 tons per year, and
- 2) The owner or operator of the source elects to offset the increase by a greater reduction in emissions of such pollutant, i.e., volatile organic material or nitrogen oxides, from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1.
- ef) In areas classified as extreme nonattainment for ozone, beginning on the date that an area is classified by USEPA as an extreme nonattainment area for ozone, any physical change in or change in the method of operation of a major stationary source which results in any increase in emissions of volatile organic material or nitrogen oxides from a discrete operation, unit, or other pollutant emitting activity shall be considered a major modification.

(Source: Amended at 17 Ill. Reg. 6973, effective April 30, 1993<u>; amended at</u>, effective _____)

SUBPART C: REQUIREMENTS FOR MAJOR STATIONARY SOURCES IN NONATTAINMENT AREAS

Section 203.301 Lowest Achievable Emission Rate

- a) For any source, lowest achievable emission rate (LAER) will be the more stringent rate of emissions based on the following:
 - 1) The most stringent emission limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless it is demonstrated that such limitation is not achievable; or
 - 2) The most stringent emission limitation which is achieved in practice by such a class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source performance standard adopted by United States Environmental Protection Agency (USEPA) pursuant to Section 111 of the Clean Air Act and made applicable in Illinois pursuant to Section 9.1 of the Act.
- b) The owner or operator of a new major stationary source shall demonstrate that the control equipment and process measures applied to the source will produce LAER.
- c) The owner or operator of a major modification shall demonstrate that the control equipment and process measures applied to the major modification will

produce LAER. This requirement applies to each emissions unit at which a net increase in emissions of the pollutant has occurred or would occur as a result of a physical change or change in the method of operation.

- d) The owner or operator shall provide a detailed showing that the proposed emission limitations constitute LAER. Such demonstration shall include:
 - 1) A description of the manner in which the proposed emission limitation was selected, including a detailed listing of information resources,
 - 2) Alternative emission limitations, and
 - 3) Such other reasonable information as the Agency may request as necessary to determine whether the proposed emission limitation is LAER.
- e) In areas classified as serious or severe nonattainment for ozone, for modifications which are major pursuant to the applicability provisions of Section 203.207(d) for volatile organic material and nitrogen oxide emissions, LAER shall apply except as provided as follows:
 - In the case of a stationary source which does not emit or have the potential to emit 100 tons per year or more of volatile organic material or nitrogen oxides, a requirement for Best Available Control Technology (BACT) as defined in Section 169 of the Clean Air Act (42 U.S.C. 7401 et seq.) substitutes for LAER. BACT shall be determined in accordance with policies and procedures published by the USEPA.
 - 2) In the case of a stationary source which emits or has the potential to emit 100 tons per year or more of volatile organic material or nitrogen oxides, the requirements for LAER shall not apply if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of such pollutant from other operations, units or activities within the source at an internal offset ratio of at least 1.3 to 1.
- e) If the owner or operator of a major source (other than a source which emits or has the potential to emit 100 tons per year or more of volatile organic material or nitrogen oxides) located in an area classified as serious or severe nonattainment for ozone does not elect to provide internal offsets for a change at the source in accordance with Section 203.207(d) of this Part, such change shall be considered a major modification for purposes of this Part, but in applying this Section in the case of any such modification, the Best Available Control Technology (BACT), as defined in section 169 of the Clean Air Act, shall be substituted for the Lowest Achievable Emission Rate (LAER). BACT shall be determined in accordance with policies and procedures published by USEPA.
- <u>f</u>) In the case of any major stationary source of volatile organic material or nitrogen oxides located in an area classified as serious or severe nonattainment for ozone which emits or has the potential to emit 100 tons per year or more of volatile organic material or nitrogen oxides, respectively, whenever any change at that source results in any increase (other than a de minimis increase) in emissions of volatile organic material or nitrogen oxides, respectively, from any discrete operation, unit, or other pollutant emitting activity at the source , such increase

<u>shall be considered a major modification for purposes of this Part, except that if the owner or operator elects to offset the increase by a greater reduction in emissions of volatile organic material or nitrogen oxides, respectively, from other operations, units or activities within the source at an internal offset ratio of at least 1.3 to 1, the requirements of this Section concerning LAER shall not apply.</u>
(Source: Amended at 17 Ill. Reg. 6973, effective April 30, 1993; amended at , effective)

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 4^{th} day of September 1997, by a vote of 7-0.

Dorothy M. Aun

Dorothy M. Gunn, Clerk Illinois Pollution Control Board