## ILLINOIS POLLUTION CONTROL BOARD March 5, 1998

IN THE MATTER OF:	)	
	)	
MAJOR STATIONARY SOURCES	)	R98-10
CONSTRUCTION AND	)	(Rulemaking - Air)
MODIFICATION (NEW SOURCE	)	_
REVIEW RULES): AMENDMENTS	)	
TO 35 ILL. ADM. CODE 203	)	

Adopted Rule. Final Order.

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

Today, the Board adopts amendments to the New Source Review (NSR) rules at 35 Ill. Adm. Code 203. The NSR rules establish a construction permit program in areas that are not in attainment with the National Ambient Air Quality Standards (NAAQS) established under the Clean Air Act (CAA), 42 U.S.C. § 7401 *et seq.* (1996). The NSR rules are intended to ensure that the construction of a major new source of air pollution, or a large increase of emissions at an existing source of air pollution, does not interfere with a nonattainment area's timely achievement of NAAQS. Most significantly, the NSR rules require those who construct these sources to offset their emissions increases through one or more of the methods that the NSR rules specify.

The United States Environmental Protection Agency (USEPA) recently issued guidance on the NSR rules entitled "Notice of Proposed Rulemaking, Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR)," 61 Fed. Reg. 38249 (July 23, 1996) (NSR Rule Proposal). USEPA's NSR Rule Proposal provides a different interpretation of the CAA provisions regarding NSR than Illinois' current NSR rules permit. In this rulemaking, the Illinois Environmental Protection Agency (Agency) proposes to amend Illinois' NSR rules so that they will more closely follow the language of the CAA. These amendments will allow the Illinois NSR rules to be interpreted in accordance with USEPA's NSR Rule Proposal.

The proposed amendments will affect only those areas in Illinois that have been designated as in "serious" or "severe" nonattainment with the ozone NAAQS. Currently, those areas are: Cook, DuPage, Kane, Lake, McHenry, and Will Counties; Aux Sable Township and Goose Lake Township in Grundy County; and Oswego Township in Kendall County (collectively, the "Chicago ozone nonattainment area").

On September 4, 1997, the Board adopted this proposal for first notice publication in the *Illinois Register*, 21 Ill. Reg. 12823 (September 19, 1997). On January 8, 1998, the Board adopted this proposal for second notice review by the Joint Committee on

Administrative Rules (JCAR). JCAR reviewed the proposed rule and certified that it had no objection to it. The Board now adopts the rule as final.

### PROCEDURAL MATTERS

On September 2, 1997, the Agency filed the proposed amendments with the Board under Section 28.5 of the Environmental Protection Act (Act). See 415 ILCS 5/28.5 (1996). Section 28.5 provides for "fast track" rulemaking for those rules that the CAA Amendments of 1990 require to be adopted. Under Section 28.5, the Board is required to proceed through the rulemaking process within specified timeframes, and has no discretion to adjust these timeframes.

The Board held its first hearing in this matter on October 17, 1997, in Room 9-040 of the James R. Thompson Center, located in Chicago, Illinois. At that hearing, the hearing officer admitted three exhibits into evidence: Exhibit 1, the prefiled testimony of Christopher Romaine, Manager of the NSR Unit of the Permit Section of the Division of Air Pollution Control of the Agency (Exh. 1); Exhibit 2, a July 2, 1996, letter from Val Adamkus at USEPA to Mary Gade at the Agency, discussing the need to implement the amendments to the NSR rules in order to meet Illinois' 9% rate of progress (ROP) plan (Exh. 2); and Exhibit 3, the draft New Source Review Workshop Manual, published by USEPA in October 1990 (Exh. 3). In accordance with Section 28.5, the hearing officer canceled the scheduled second and third hearings because no one requested that these hearings be held.

The Board received three public comments during the first notice comment period: a public comment filed on November 5, 1997, by Whitney Wagner Rosen on behalf of the Illinois Environmental Regulatory Group (IERG) (PC 1); a public comment filed on November 6, 1997, by Howard & Howard on behalf of W.R. Meadows, Inc. (Meadows) (PC 2); and a public comment filed on November 6, 1997, by Laurel Kroack on behalf of the Agency (PC 3). The Board addressed these comments in its second notice opinion and order, In the matter of Major Stationary Sources Construction and Modification (New Source Review Rules): Amendments to 35 Ill. Adm. Code 203 (January 8, 1998), R98-10. While the Board's response to those comments is summarized in this opinion and order, readers interested in a more detailed discussion should consult the Board's January 8, 1998, order.

The Board adopted the proposed rule for second notice and JCAR review on January 8, 1998. JCAR considered the proposed rule at a meeting on February 17, 1998, and certified no objection to the proposed rule. The Board received JCAR's certification of no objection on February 20, 1998. Under Section 28.5, the Board must adopt a final rule and submit it to the Secretary of State for publication and certification within 21 days after the Board receives JCAR's certification of no objection. The Board meets that requirement with this opinion and order.

#### DISCUSSION

#### Background

As noted above, the NSR rules are designed to ensure that the construction of a new major stationary source of air pollution, or a large increase of emissions at an existing source, does not interfere with a state's demonstration that it has attained NAAQS and does not delay a state's timely achievement of NAAQS. Exh. 1 at 2. For the purposes of NSR rules, a "source" or "stationary source" is an entire plant or manufacturing complex. *Id.* at 5; see 42 U.S.C. §§ 7411(a)(3) and 7661(2) (1996); 35 Ill. Adm. Code 203.112, 203.136. Under those rules, a "major stationary source" or "major source" in an ozone nonattainment area is a stationary source that emits, or has the potential to emit, volatile organic material (VOM) or nitrogen oxides (NOx) in the amount of: (1) 50 tons per year (TPY) in areas designated as in serious nonattainment; or (2) 25 TPY in areas designated as in severe nonattainment. See Exh. 1 at 8; 35 Ill. Adm. Code 203.206(b). The NSR rules are administered as part of the permit process outlined in 35 Ill. Adm. Code 201. Exh. 1 at 2.

The following projects are considered "major" under the NSR rules: 1) construction of a new major source; 2) a "significant" modification to a major source, considering the net change in emissions which will result from a project; 3) a change at a source which is not major, where the change by itself constitutes a major source; and 4) a change at a source which is not major, where the change by itself constitutes a major modification. *Id.* at 5-6.

Four requirements are imposed upon owners or operators of major projects under Subpart C of Part 203. *Id.* at 3. The first requirement is that the source achieve the lowest achievable emissions rate (LAER) from the major project, or use the best available control technology (BACT) in the major project. *Id.* The second requirement is that the source compensate for the major project with "emission offsets." *Id.* The third requirement is that the owner or operator of the source be in present compliance at all other sources in Illinois under its ownership or control. *Id.* at 4. The final requirement is that the source analyze alternatives to a particular major project to determine whether the benefits of the project outweigh its environmental and social costs. *Id.* 

The 1990 CAA amendments modified the NSR program. In <u>Amendments to New Source Review Rules</u> (April, 22, 1993), R92-21, the Agency proposed that the Board amend Part 203 to include the NSR provisions for serious and severe ozone nonattainment areas that the 1990 CAA amendments require. *Id.* at 7-8.

Among other things, these rules implement three provisions of the CAA. First, they implement Section 182(c)(6) of the CAA, 42 U.S.C. § 7511(a) (1996), which describes when an increase in emissions will be considered "de minimis" (and therefore not a "major modification"). Second, Part 203 implements Section 182(c)(7) of the CAA, which sets forth a "Special rule for modifications of sources emitting less than 100 tons." Third, Part 203 implements Section 182(c)(8) of the CAA, which sets forth a "Special rule for modifications of sources emitting 100 tons or more." Id. at 8-10.

The amendments that the Board adopted in R92-21 reflect the Agency's understanding of USEPA's preliminary interpretation of Section 182(c)(6), (7), and (8). *Id.* at 10. In accordance with that understanding, the Agency provided in Section 203.207(d) that any change at a major stationary source that results in an increase in VOM or NOx emissions of 25 TPY or more from any discrete operation, unit, or other pollutant emitting activity would be considered a major modification unless (1) the source emits, or has the potential to emit, less than 100 TPY of VOM or NOx  $\underline{\text{and}}$  (2) the source internally offsets the emissions increase at a ratio of at least 1.3 to 1.

The amendments adopted in R92-21 do not allow sources to "net out" of the NSR rules on a source-wide basis. As Mr. Romaine explained:

([Under the current rules], one can consider other increases and decreases at a discrete unit that have occurred during [a time period specified in the rules], but not increases and especially not decreases elsewhere at the source.) As a result, significant increases in nonattainment emissions involving individual units can trigger nonattainment New Source Review even if the overall net change in emissions at a source is not significant. *Id.* at 10-11.

USEPA has since issued guidance on the NSR program that provides a different interpretation of the CAA provisions on NSR. *Id.* at 13; see NSR Rule Proposal. The language of Illinois' current NSR rules precludes USEPA's new interpretation. Exh. 1 at 14-15. In this rulemaking, the Agency proposes amendments to allow Illinois' NSR rules to be interpreted in accordance with USEPA's new interpretation. *Id.* As Mr. Romaine explained, "The proposed revisions allow for the interpretation of the special rules as set forth in the NSR Rule Proposal, without mandating this interpretation . . . . The [Agency's] proposed revisions . . . follow the language of the [CAA] more closely. This will allow the rules to accommodate [USEPA's] new interpretation." *Id.* 

The primary effect of the proposed amendments will be to allow a change in the way in which emissions increases from modifications are calculated. This change will affect which emissions increases are considered "significant" or a "major modification" and subject to the four requirements set forth above. Generally, the proposed amendments will provide sources with increased emissions an opportunity to "net out" of the NSR rules on a source-wide basis, thereby avoiding NSR requirements entirely. See Agency "Statement of Reasons," filed September 2, 1997, (Agency Statement) at 5; Tr. at 28-29.

<sup>&</sup>lt;sup>1</sup> If such a source emits, or has the potential to emit, 100 TPY or more of VOM or NOx, the modification is considered a major modification even if the source provides internal offsets at a 1.3 to 1 ratio. However, those internal offsets allow the source to avoid some NSR requirements. See 35 Ill. Adm. Code 203.301(e)(2).

The proposed amendments also will affect the calculation of certain sources' baselines and allocations of allotment trading units (ATUs) under the Emissions Reduction Market System (ERMS), 35 Ill. Adm. Code 205. See Agency Statement at 7, 10; Exh. 1 at 12. ERMS requires certain point sources within the Chicago ozone nonattainment area to establish "baseline emissions." Generally, the source then will receive an allotment of ATUs equivalent to its baseline emissions less 12%. At the end of the calendar year, the source must hold ATUs in an amount not less than its VOM emissions during the immediately preceding ozone season. If the source's VOM emissions exceed its allotment of ATUs, the source may buy ATUs from other sources who are able to reduce their VOM emissions by more than 12%.

According to the Agency, under the current NSR rules "certain projects whose overall effect is to reduce VOM emissions at a source will trigger applicability of the additional requirements of nonattainment New Source Review unless accompanied by internal offsets at a ratio of 1.3 to 1." Exh. 1 at 12. Thus, the effect of the NSR rules, as currently drafted, would be to "substantially reduce the baseline emissions [for ERMS purposes] of any of these generally beneficial projects that are subject to the special rules. In other words, more reductions are required for purposes of New Source Review so that fewer reductions are available to the source for purposes of the ERMS." *Id*.

The ability to "net out" of the NSR rules on a source-wide basis under the proposed amendments will allow some sources to avoid this situation. The Agency addressed the issue of the potential loss in environmental benefit from the proposed amendments as follows:

In the absence of a proposed ERMS, one could argue that the proposed amendments also reduce the environmental benefits from nonattainment New Source Review. That is, certain projects that would have been controlled with LAER or accompanied by internal offsets (which result in a net air quality benefit because of the 1.3 to 1.0 offset ratio) will no longer be required to apply LAER or provide offsets, so that these environmental benefits will therefore not be provided in some cases. However, the ERMS establishes a much broader incentive for all sources to seek opportunities to reduce VOM emissions and the ERMS mandates a set level of reduction overall in area-wide emissions, without establishing a source-by-source obligation that may be very costly for particular sources depending on their unique circumstances. *Id.* at 17.

### **Summary of Amendments**

## Scope of Changes

Two of the commentors, IERG and Meadows, supported the proposed changes. See NSR Rules (January 8, 1998), R98-10, slip op. at 5-6. However, Meadows asked the Board to expand this rulemaking to correct a conflict that Meadows perceived between Sections 203.211 and 203.206(e) over whether fugitive emissions should be included when the Agency determines whether a source is a major stationary source. *Id.* at 6. The Agency opposed this

expansion, and the Board found that the record did not support it. *Id.* at 6-7. The Board noted that Meadows could request that the Board open a new rulemaking to consider this issue.

#### Section 203.206

This section identifies "major stationary sources." The Agency proposes to delete subsection (d) of this section. That subsection addresses when the "reconstruction" of a major stationary source will be considered the construction of a major stationary source. Under the proposed amendments, a reconstruction will only be considered a major modification if the net emissions increase from the reconstruction is not *de minimis* under Section 203.207(d). See Agency Statement at 13. In light of this change, the Agency maintains that specific rules to determine when a "reconstruction" will be considered the construction of a new major stationary source are no longer necessary. *Id.* The Board agrees and has stricken subsection (d).

#### Section 203.207

This section identifies "major modifications." Subsection (a) provides that "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." Currently, this subsection excepts certain changes described in subsection (c). The Agency proposes to expand these exceptions to include the changes described in subsections (d), (e), and (f). Tr. at 17. The Board has amended subsection (a) accordingly.

In accordance with its proposed change to Section 203.206, the Agency proposes to delete from subsection (c)(1) references to "replacement" and "reconstruction." See Agency Statement at 13-14. The Board finds this change appropriate.

The Agency proposes to add a new Section 203.207(d), which provides that increased emissions from a change at a stationary source will be considered "*de minimis*," and not a major modification, if the increase in net emissions from the 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, including the year in which such increase occurred. Under the NSR Rule Proposal, if an increase is "*de minimis*" on a source-wide basis, the source "nets out" of NSR requirements entirely. See Agency Statement at 5; Tr. at 28-29.

The Agency also proposes to add a new Section 203.207(e), which would apply to a major stationary source emitting, or with the potential to emit, less than 100 TPY of VOM or NOx that has a non-*de minimis* increase in VOM or NOx emissions. Under the NSR Rule Proposal, if such sources internally offset increases at any discrete operation, unit, or other

 $<sup>^2</sup>$  The Agency's proposed provision is similar, although not identical, to the current Section 203.207(d). The proposed Section 203.207(e) follows Section 182(c)(7) of the CAA as closely as possible. See Agency Statement at 14.

activity that is part of the major modification at a ratio of at least 1.3 to 1, the increases at the discrete operation, unit, or activity will not be considered a major modification. See Agency Statement at 5. As Mr. Romaine explained, using an example involving emissions increases and decreases at discrete operations:

[T]he special rules for modification may alter how the New Source Review rules apply to discrete operations that are part of the larger major modification. In particular, a source may select certain discrete operations for which it would provide internal offsets and be excused from the LAER or BACT control technology requirement of the New Source Review Rules for those selected discrete operations. The control technology requirement would still apply to other discrete operations for which such internal offsets were not provided. Exh. 1 at 13-14.

The Board finds that the Agency's proposed changes to Section 203.207 are supported by the record.

#### Section 203.301

Section 203.301 describes how and when LAER applies. The Agency proposes to delete the current subsection (e) and to add new subsections (e) and (f).

Initially, the Agency agrees that subsection (c) should be amended to except the new subsections (e) and (f). Tr. at 20. This change will clarify that sources meeting the requirements of subsection (e) or (f) are exempt from the requirement to use LAER. The Board has changed the proposal accordingly.

The Agency's proposed Section 203.301(e)<sup>3</sup> specifies that a major stationary source that emits, or has the potential to emit, less than 100 TPY and that has a non-*de minimis* emissions increase is excused from LAER even if internal offsets are not provided at a ratio of at least 1.3 to 1. However, the source must implement BACT. BACT for such sources will be determined in accordance with USEPA policies and procedures.<sup>4</sup>

 $<sup>^3</sup>$  This proposed provision is similar, although not identical, to the current Section 203.301(e)(1).

<sup>&</sup>lt;sup>4</sup> At the hearing, Mr. Romaine stated that the most authoritative publication of USEPA's procedures for determination of BACT is USEPA's New Source Review Workshop Manual, prepared in October 1990 (Exh. 2). Tr. at 21. Mr. Romaine explained that while it is a draft document, it is widely relied upon as the authoritative statement of how to determine BACT. *Id.* at 21-22.

The Agency also proposes to add Section 203.301(f).<sup>5</sup> This section applies only to major stationary sources that emit, or have the potential to emit, 100 TPY or more of VOM or NOx. It allows such sources to avoid the application of LAER if the source internally offsets a non-*de minimis* increase in emissions at a ratio of 1.3 to 1. *Id.* at 33-34; see page 8 herein. Nevertheless, Mr. Romaine testified that such an emissions increase would still be considered a major modification, and thus the source would be subject to the NSR requirements of going "through an analysis of alternatives to a particular project or particular emission unit, and it would also have to show compliance in other existing major sources in the state." *Id.* at 31-32; see 35 Ill. Adm. Code 203.305, 203.306.

Mr. Romaine added that providing the internal emission offsets at 1.3 to 1 under Section 203.301(f) not only would allow the source to avoid LAER, but it would "satisfy the general offset requirement of Section 203.302." Tr. at 32-33. The Board agrees with this interpretation as it relates to major modifications in serious or severe ozone nonattainment areas under Section 203.302(a)(1) and to the extent it is specific to the discrete operation, unit, or other pollutant emitting activity for which such internal offsets were provided.

The Board finds that the Agency's proposed changes to Section 203.301 are supported by the record.

### Impact of Proposed Rule Changes on the ERMS

In Attachment 1 to Exhibit 1, the Agency provided an example of how the proposed amendments, if interpreted under USEPA's NSR Rule Proposal, will affect certain sources' ERMS baseline emissions. For the benefit of the public and the regulated community, the Board will address this example here.<sup>6</sup>

As noted above, the ERMS requires certain point sources within the Chicago ozone nonattainment area to establish "baseline emissions," which serve as the basis for a source's allotment of ATUs. The effect of the current NSR rules would be to reduce the ATU allotments of certain sources. For example, assume a source wants to undertake a new project, Project A, at a plant. Project A is assumed to be a discrete unit, operation, or other emitting activity. Tr. at 23. Project A will result in an increase in VOM emissions of 30 TPY and under the current NSR rules would be considered a major modification. Assuming the source emits, or has the potential to emit, 100 TPY or more, the source would need to offset this increase internally at a ratio of 1.3 to 1 (in this instance, 39 TPY) to avoid LAER. Assume the source also has a Project B, which currently emits 50 TPY. To avoid LAER, the source could accept an 11 TPY permit limitation on VOM emissions from Project B (50 - (1.3)(30) = 11). Under the current NSR rules, the source's ERMS baseline emissions and ATU allotment would be as follows:

<sup>&</sup>lt;sup>5</sup> This proposed provision is similar, although not identical, to the current Section 203.301(e)(2). The proposed Section 203.301(f) follows Section 182(c)(8) of the CAA as closely as possible. See Agency Statement at 14.

<sup>&</sup>lt;sup>6</sup> The Board notes that the proposed NSR amendments would apply prospectively only.

<b>Evaluation</b>	of VOM	Fmissions	(TPV)
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Project	Actual at	Netting	Permit	"Annual"	Seasonal	Allotment
	Start	Evaluation	Limitations	ERMS	Baseline	
				Baseline		
A	0	+ 30	30	20*	8.34**	8.34***
В	50	- 39	11	11	4.59**	4.04****
Total	50	"0"	41	31	12.93	12.4****

- \* Assumed low average actual emissions during initial years of operation as related to ERMS baseline. Tr. at 26.
- \*\* Seasonal baseline reflects 5/12 of the "annual baseline" to account for the five month ozone season, assuming uniform operation through the year.
- \*\*\* Allotment reflects 100% of seasonal baseline, as Project A is assumed to meet "Best Available Technology (BAT)" under the ERMS. Tr. at 25-26.
- \*\*\*\* Allotment reflects 88% of seasonal baseline, as Project B is not subject to LAER and receives an allotment 12% lower than its baseline emissions.
- \*\*\*\*\* The Board notes that an "allotment" is defined as "the number of allotment trading units (ATUs) allotted to a source by the Agency, as established in the source's CAAPP permit." 35 Ill. Adm. Code 205.130. An "ATU" is defined as "a tradable unit that represents 200 lbs of VOM emissions and is a limited authorization to emit 200 lbs of VOM emissions during the seasonal allotment period." *Id*.

Under the proposed amendments, interpreted in accordance with USEPA's NSR Rule Proposal, the increase from Project A may be netted against any decrease from Project B. Therefore, to avoid the requirements of the proposed NSR rules (including LAER) entirely, the source need only ensure that its source-wide emissions increase by less than 25 TPY. In this example, it could do so by decreasing its Project B emissions by 5.1 TPY. The source would no longer be required to internally offset the increased emissions from Project A at a 1.3 to 1 ratio to avoid LAER, and would have the following ERMS baseline emissions and ATU allotment:

Evaluation of VOM Emissions (TPY)

Project	Actual at Start	Netting Evaluation	Permit Limitations	"Annual" ERMS	Seasonal Baseline	Allotment
	Start	Lvaluation	Limitations	Baseline	Daseinie	
Α	0	+ 30	30	20	8.34	7.34**
В	50	- 5.1	44.9	44.9	18.72	16.47
Total	50	+ 24.9	74.9*	64.9*	27.06	23.8

- \* Attachment 1 to Exhibit 1 incorrectly reads "79.9." The figure has been corrected above.
- \*\* In the first example, in which the Agency applied the current NSR rules, the Agency assumed that Project A uses BAT. Accordingly, its seasonal baseline was not reduced 12% for the allotment. See 35 Ill. Adm. Code 205.405(b). In the second example, in which the

Agency applied the proposed NSR rules in accordance with USEPA's NSR Rule Proposal, the Agency did not assume BAT for Project A. Accordingly, its seasonal baseline was reduced 12% for the allotment, from 8.34 TPY to 7.34 TPY. If the BAT assumption also had been made for Project A in the second example, the source's total allotment of ATUs would have increased as it would have been based on 24.8 TPY, rather than 23.8 TPY.

#### CONCLUSION

The Board finds that the Agency's proposed amendments, as modified, are economically reasonable and technically feasible, and will allow Illinois' NSR rules to accommodate USEPA's most recent interpretation of the CAA provisions regarding NSR. Accordingly, the Board adopts these amendments as final.

#### **ORDER**

The Board directs that the following amendments be submitted to the Secretary of State for publication as a final rule.

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	Definitions
203.103	Actual Construction
203.104	Actual Emissions
203.107	Allowable Emissions
203.110	Available Growth Margin
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 Ill. Reg. , 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 subsection (b)(5)(B),
- 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;
  - 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;

- Fossil-fuel boilers (or combination thereof) totaling more than 250 million Btu per hour heat input;
- 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;
- Fossil fuel-fired steam electric plants of more than 250 million Btu per hour heat input;
- 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	Ill. Reg,	effective
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Section 203.207 Major Modification of a Source

- a) Except as provided in subsection (c), (d), (e) 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</u> repair, <u>and replacement which does not constitute reconstruction pursuant to Section 203.206(c)</u>.
  - 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.
- 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.
- 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 that 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 of 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. 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:

- 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	Ill. Reg.	, effective
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# 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

- 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) Except as provided in subsection (e) or (f) below, tThe 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.
- 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(e) 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.

- 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.
  - 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.
- 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 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.

(Source: Amended at	Ill. Reg.	, effective	
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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 5th day of March 1998, by a vote of 6-0.

Dorothy M. Gunn, Clerk

Illinois Pollution Control Board

Dorothy In Gun