ILLINOIS POLLUTION CONTROL BOARD
December 6, 1984

IN THE MATTER OF:	)	
	)	
PARTICULATE EMISSION LIMITATIONS	)	R82-1
RULE 203(g)(1) AND 202(b) OF	)	
CHAPTER 2	)	

PROPOSED RULE. SECOND NOTICE

PROPOSED OPINION AND ORDER OF THE BOARD (by J. D. Dumelle):

On July 19, 1984, the Board adopted a Proposed Rule/First Notice Proposed Opinion and Order which was published in the Illinois Register on August 24, 1984, at 8 Ill. Reg. 15561. Four comments were filed during the first notice period which closed on October 10, 1984. Public Comment No. 18 was filed on October 4, 1984, on behalf of the Illinois Power Company (IPC). Public Comments Nos. 19 and 20 were filed on October 19, 1984, on behalf of the Illinois Environmental Protectin Agency (Agency) and A. E. Staley Manufacturing Company (Staley), respectively. Public Comment No. 21 was filed by Bud Meyer of the DuPage Health Department.

Staley supports the rules as proposed for first notice, but also states that "the Board should allow existing sources a specified amount of time after promulgation of the proposed rules to attain compliance." It recommends a 12-18 month period.

Bud Meyer states that the amendment of 35 Ill. Adm. Code 212.203 is confusing and could be more clearly worded.

The Agency supports the adoption of 35 Ill. Adm. Code 212.123 which establishes opacity limits. However, it disagrees with the Board's failure to include a second significant decimal figure in 35 Ill. Adm. Code 212.201. It also strongly opposes the modification to the introductory paragraph of 35 Ill. Adm. Code 212.203 which changes the numerical limit from 0.2 lbs/MBtu to 0.25 lbs/MBtu and criticizes the paragraph added to that section.

IPC also disagrees with the proposed amendments to Section 212.203 and states that the Board erred in rejecting IPC's request for a mechanism allowing site-specific relief to be granted in an adjudicatory proceeding.

Since no one has commented adversely upon 35 Ill. Adm. Code 212.123, 212.202 or 212.204, the Board proposes to adopt these sections for second notice in the same form as they were proposed for first notice with only very minor, non-substantive, language changes to clarify those rules. Each of the other sections will be more fully addressed.

Section 212.201

The Agency has requested that the Board amend the 0.1 lbs/MBtu/hr standard of Section 212.201 to 0.10 lbs/MBtu/hr. It points out that this is the number of significant digits used in the air quality modeling which supports the standard and that the amendment is consistent with the Agency's historical application of these rules both in terms of permitting and the State Implementation Plan. The Board finds the Agency's argument persuasive and will so amend the section. The Board notes, however, that by so amending this standard, it does not intend to imply that the standard as originally adopted was intended to mean anything other than 0.10 lbs/MBtu/hr.

Section 212.203

The amendments to 35 Ill. Adm. Code 212.203 have generated the bulk of the comments. This section is in essence a partial grandfather clause which was intended to equitably treat those sources for which substantial expenditures were made prior to adoption of the original rule which resulted in near compliance. The original rule allowed certain sources which emitted between 0.1 to 0.2 lbs/MBtu/hr to continue in operation so long as their emissions did not increase by more than 0.05 lbs/MBtu/hr from their base emissions and so long as the emissions did not surpass the 0.2 pound limit.

In the first notice order the Board made two modifications to this section. The first allowed the grandfathered sources to emit up to a maximum of 0.25 lbs/MBtu/hr. This was done to remove any ambiguity with respect to a source with a base emission of between 0.15 and 0.20. Of course, the possible ambiguity could have also been resolved by setting the limitation at 0.20 lbs. The Board found that the former action was more in accordance with the orignal intent of the rule. The Agency, however, disagrees, commenting that the rule is unambiguous and that the 0.20 standard has been "applied by the Agency for purposes of issuing permits and for developing the State Implementation Plan." (See P.C. No. 19, p. 3, and 5/26/82, R. 165). IPC does not appear to disagree. Further, the Agency points out that there are at least two sources in non-attainment areas whose allowable emissions could increase if the Board were to finally adopt this modification and that the potential impact has not been assessed in the record. Finally, the only participant who argued that the 0.25 limit was the appropriate one was the Village of Winnetka, and, as more fully discussed below, the Village will be exempted from the application of this rule pending a site-specific determination.

The Board is persuaded by the Agency's comments and a review of the record that a 0.25 standard has not been adequately supported in the record and the Board will, therefore, propose the 0.20 lbs/MBtu/hr standard for second notice.

The second modification of this section was proposed to minimize, so far as the record supported it, the impact of changes in the test methods for the determination of particulate emissions between 1972 and the present. The Board attempted to make the rule more flexible by allowing the use of original design specifications at full load in lieu of performance tests at part load (to simplify the rather complex provision). The Agency has commented that "the effect is to further complicate a complicated rule" (PC No. 19, p. 4). IPC contends that the modification addresses "only one limited aspect of the multifaceted problem of changing test conditions and testing methodologies" and "is so ambiguous that it may be unenforceable" (PC No. 18, p. 6). Bud Meyer finds the proposed modification confusing. Of the commenters only Staley supports this modification.

The Board was aware at the time it proposed this modification that it was not a complete answer to the problem of the changing test methods used to determine degradation. However, in the Board's first notice opinion, the Board found the original rule to be unfair in light of the changed test methods and found IPC's proposal to rectify the problem overly vague. Therefore, the Board modified IPC's proposal in the only more defined manner for which it could find adequate support in the record. However, based upon the comments and a review of the record, the Board finds its first notice modification unsatisfactory.

The Board continues to find that the changes in test methods have rendered the degradation provision troublesome at best: i.e., to continue the original provision would be unfair to affected facilities, and the record fails to support a modification of that provision which would remedy that unfairness. Further, the originally proposed rule, the Board's first notice proposal, and IPC's pre-first notice proposal leave much to be desired in terms of clarity and enforceability. The Board, therefore, proposes to delete that provision and instead to propose the amendment of Section 212.203 in substantial conformance with IPC's proposal presented in its public comment (PC No. 18, p. 12), except that it shall apply only to those facilities which are located in attainment areas.

In P.C. No. 18 IPC proposed a revision to Section 212.203 which it contends would satisfy both the Board's and its concerns. That provision would allow all eligible sources to emit up to 0.20 lbs/MBtu/hr. To qualify, such source would have had to achieve emissions of less than that amount based on the emission test performed closest to April 14, 1972 or would have had to be in compliance with a variance as of that date sufficient to achieve that emission rate. In short, IPC proposes to retain the original rule without a degradation provision.

IPC had earlier proposed a similar provision to which the Agency objected. (See Agency Comment, December 20, 1983, pp. 16-21). The Agency contends that "the factual evidence provided by Illinois Power does not support the conclusion that the differences in the tests are resulting in emissions which would jeopardize a source's qualifying for an emission limit" under the

original rule (ibid, p. 16). However, to contend that a provision should be retained which has been found to be unfair simply because it has not yet resulted in any unfairness ignores potentially affected facilities.

The Agency also "finds the record insufficient to conclude that adoption of the change would not jeopardize air quality on a state-wide basis" (ibid, pp. 18-19). The Agency does, however, admit that the "air quality demonstration performed by [IPC]... may indicate that isolated sources in rural areas could increase emissions by 0.1 lb/mBtu without significantly impacting air quality" and its real concern appears to be that "an increase in allowable emissions for sources in non-attainment areas must be scrutinized" (ibid, p. 20). The Agency further contends that such increases have not been addressed on the record, and while IPC did present a modeling study of its Wood River plant in the East St. Louis Major Metropolitan Area, the Agency's contention is for the most part correct.

The Board finds that the record includes adequate support for allowing eligible sources to emit up to 0.20 lbs/MBtu/hr in attainment areas but insufficient support for such sources in non-attainment areas. Therefore, the Board proposes to allow eligible sources in attainment areas to emit up to that amount. However, the Board notes that this modification cannot be used to allow unreasonable degradation. The Board expects that all sources will do their best to adequately maintain their equipment and notes further that the Agency has the power to require adequate maintenance as a permit condition pursuant to 35 Ill. Adm. Code 201.156 and 201.161.

A separate docket will be opened in this proceeding which may be utilized to establish site-specific standards for those facilities in nonattainment areas which would have qualified for a limitation of greater than 0.10 lbs/MBtu/hr under the original proposal. Such facilities would be required to file a site-specific proposal within 3 months of the filing of these rules and to proceed to hearing within 3 months thereafter. The facilities would be required to demonstrate that they meet the requirements of the class and that emissions at the proposed level would not jeopardize attainment of the National Ambient Air Quality Standards, the Act, or Board rules. They would further be required to assess the adverse environmental impact of emitting greater than 0.10 lbs/MBtu/hr and the economic cost increase of meeting the otherwise applicable standard.

Site-Specific Relief

The Board had hoped to avoid opening another docket within this proceeding. However, the comments have made it clear that there simply is not sufficient evidence in the record to support any general rule regarding sources which would qualify for a relaxed emission limitation pursuant to Section 212.203 but for being in a nonattainment area.

The Board anticipates that the economic impact study prepared by the Department of Energy and Natural Resources and the hearings held regarding it will be sufficient to satisfy those requirements of Section 27 of the Illinois Environmental Protection Act (Act) and that this docket may proceed on an expedited basis.

The Village of Winnetka has attempted to substantiate site-specific particulate limitations for its power plant during the course of this proceeding. The Board, however, has attempted to establish a rule of general applicability. The Board now proposes such a rule. However, the Board has also opened a new docket, R82-1, docket A for the purpose of establishing site-specific limitations for those facilities which are not covered by the general rule. Since such a docket has been established, the Village of Winnetka will be allowed to seek such site-specific relief under new Section 212.209.

The Board will not establish any adjudicatory procedure for other facilities as again urged by IPC and has not changed its reasons for denying that request. The first notice proposed opinion relied on the anticipated enactment of SB 1862 which, in fact, became effective on September 9, 1984, as Public Act 83-1355. Such reliance is, therefore, no longer misplaced. Further, IPC has now commented upon the Board's interpretation of that statute and the Board is under no obligation to provide notice as to what special circumstances must be shown to be entitled to such relief. It is sufficient to note that there must be some special circumstances shown or most of Section 27 of the Act would become meaningless.

Effective Date

Staley commented (P.C. No. 20) that the Board should include an effective date for these rules to allow "existing sources a specified amount of time after promulgation of the proposed rules to attain compliance." It suggests 12-18 months after promulgation. While most sources are in present compliance, and the Board expects those sources to remain in compliance, there may well be sources which are not and cannot immediately come into compliance. Therefore, since these rules are, at least in theory, new rules, the Board will add new Section 212.210 to establish an effective date of January 1, 1987.

Extension of Comment Period

The rules that the Board today proposes for second notice differ from those proposed for first notice. While the Board does not feel that these changes are so substantial, or involve such different issues, that it is necessary to return to first notice, the Board will not file its second notice until at least 35 days after adoption of this opinion and order. During that period of time, the Board will accept comments on this second notice proposal. The Board notes, however, that it is not interested in the reiteration of previously filed comments, but rather is interested in comments on the proposed changes from first notice.

British Thermal Units

The Board's abbreviation of British Thermal units stated in 35 Ill. Adm. Code 201.103 is at odds with most other authorities and has been used somewhat inconsistently as is its abbreviation for million British thermal units. Therefore, the Board will amend that section to accommodate "MBtu," "mmBtu," "Mbtu" and "mmbtu." When the Board completes its updating of the air pollution rules under docket R79-14, the abbreviations can be made consistent.

ORDER

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLEB: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 201
PERMITS AND GENERAL PROVISIONS

Section 201.103 Abbreviations and Units

a) The following abbreviations have been used in this Part:

btu or Btu	British thermal units (60°F)
gal	gallons
hp	horsepower
hr	hour
gal/mo	gallons per month
gal/yr	gallons per year
kPa	kilopascals
kPa absolute	kilopascals absolute
kW	kilowatts
l	liters
mm~~btu/hr~~ or M	million ~~btu's-per-hour~~
MW	megawatts; one million watts
psi	pounds per square inch
psia	pounds per square inch absolute

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

English	Metric
1 gal	3.785 l
1000 gal	3.785 cubic meters
1 hp	0.7452 kW
1 mmbtu/hr	0.293 MW
1 psi	6.897

PART 212
VISUAL AND PARTICULATE MATTER EMISSIONS
SUBPART B: VISUAL EMISSIONS

Section 212.123 Limitations for All Other Sources

a) No person shall cause or allow the emission of smoke or other particulate matter from any ~~other~~ emission source other than those sources subject to Section 212.122 into the atmosphere of an opacity greater than 30 percent.

b) Exception: The emission of smoke or other particulate matter from any such emission source may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such more opaque emissions permitted during any 60 minute period shall occur from only one such emission source located within a 305 m (1000 ft) radius from the center point of any other such emission source owned or operated by such person, and provided further that such more opaque emissions permitted from each such emission source shall be limited to 3 times in any 24 hour period.

SUBPART E: PARTICULATE MATTER MISSIONS
FROM FUEL COMBUSTION EMISSION SOURCES

Section 212.201 Existing Sources Using Solid Fuel Exclusively Located in the Chicago Area

No person shall cause or allow the emission of particulate matter into the atmosphere from any existing fuel combustion source using solid fuel exclusively, located in the Chicago major metropolitan area, to exceed 0.15 kg of particulate matter per MW-hr of actual heat input in any one hour period (0.10 lbs./MBtu/hr) except as provided in Section 212.203.

~~(Board Notes. Sections 212.201 through 212.205 have been rules invalid by the First District Appellate Court, Commonwealth Edison v. PCB, 25 Ill. App. 3d 271, 323 NE 2d 84 and in Ashland Chemical Corp. v. PCB, 64 Ill. App. 3d 169. Section 212.205 was adopted after the Court challenges and is a valid rule.)~~

Section 212.202 Existing Sources Using Solid Fuel Exclusively Located Outside the Chicago Area

No person shall cause or allow the emission of particulate matter into the atmosphere from any existing fuel combustion source using solid fuel exclusively, which is located outside the Chicago major metropolitan area, to exceed the limitations specified in the table below and Illustration A in any one hour period except as provided in Section 212.203.

METRIC UNITS

H (Range) Megawatts	S Kilograms per megawatt
Less than or equal to 2.93	1.55
Greater than 2.93 but small than 73.2	$3.33\ H^{-0.715}$
Greater than or equal to 73.2	0.155

ENGLISH UNITS

H (Range) Million Btu per hour	S Pounds per million btu
Less than or equal to 10	1.0
Greater than 10 but small than 250	$5.18\ H^{-0.715}$
Greater than or equal to 250	0.1

where:

S = Allowable emission standard in lbs/MBtu/hr or kg/MW of actual heat input, and

H = Actual heat input in million Btu per hour or megawatts

Section 212.203 Existing Controlled Sources Using Solid Fuel Exclusively

Except for those sources subject to Section 212.209, ~~Notwithstanding Sections 212.201 and 212.202~~ any existing fuel combustion source using solid fuel exclusively may, ~~in any one hour period~~, emit up to, but not exceed 0.31 kg/MW-hr (0.20 lbs/MBtu) of actual heat input in any one hour period, if the source is located in an attainment area as designated at 40 CFR 81 (1984) and as of April 14, 1972, either of the following conditions was met:

a) The emission source had achieved ~~has~~ an hourly emission rate ~~based on original design or equipment performance test conditions, whichever is stricter,~~ which is less than 0.31 kg/MW-hr (0.20 lbs/MBtu) of actual heat input based on the emission test performed closest to that date ~~and the emission control of such source is not allowed to degrade more than 0.077 kg/MW-hr (0.05 lbs/MBtu) from such original design or equipment performance test conditions,~~ or,

b) The source was ~~is~~ in full compliance with the terms and conditions of a variance granted by the Pollution

Control Board sufficient to achieve an hourly emission rate less than 0.31 kg/MW-hr (0.20 lbs/MBtu), of actual heat input, and construction ~~has~~ had commenced on equipment or modifications prescribed under that program and ~~emission control of such source is not allowed to degrade more than 0.077 kg/MW-hr (0.05 lbs./mBtu) from original design or equipment performance test conditions, whichever is stricter~~ in the initial emission tests following the completion of the construction program the source achieved an hourly emission rate less than 0.31 kg/MW-hr (0.20 lbs/MBtu).

Section 212.204 New Sources Using Solid Fuel Exclusively

No person shall cause or allow the emission of particulate matter into the atmosphere ~~in any one hour period~~ from any new fuel combustion emission source using solid fuel exclusively to exceed 0.15 kg of particulate matter per MW-hr of actual heat input (0.1 lbs./mBtu) in any one hour period.

Section 212.209 Miscellaneous Sources

The Village of Winnetka's power plant and those sources which would be subject to the limitation of Section 212.203, except for being located in an area designated as nonattainment at 40 CFR 81, shall meet the limitations of Section 212.201 or Section 212.202, whichever applies, unless a petition for a site-specific limitation applicable to that source is filed under R82-1, docket A prior to September 1, 1985. Upon final action concerning that petition the source shall meet the site-specific limitations therein granted, or shall meet the otherwise applicable limitation if such relief is denied. Any petitions submitted pursuant to this Section shall include, but not be limited to the following:

a) A showing that the affected facility is among the class of facilities contemplated by this Section;

b) A demonstration that the requested relief will not jeopardize attainment of the National Air Quality Standards nor result in violations of the Act or Board rules;

c) The environmental impact of emitting more than 0.10 lbs/MBtu/hr;

d) The economic cost increase of meeting the otherwise applicable standard;

e) The expected useful life of the facility; and

f) A compliance plan, if any.

Section 212.210 Effective Date

This Part shall be effective immediately, but compliance with Sections 212.123, 212.201, 212.202, 212.203 and 212.204 shall not be required until January 1, 1987.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Proposed Opinion and Order was adopted on the 6th day of December, 1984 by a vote of 6-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board